



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

March 5, 1993

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Response to NRC Bulletin 90-01 Supplement 1
Dresden Station Units 2 and 3,
(NRC Dockets 50-237 and 50-249)

- References: 1) NRC Bulletin 90-01 Supplement 1, "Loss of Fill Oil
in Transmitters Manufactured by Rosemount," dated
December 22, 1992.
- 2) M.H. Richter letter to U.S. NRC, Dresden Stations Units 2
and 3, Quad Cities Stations 2 and 3, Zion Station Units 1
and 2, LaSalle County Station Units 1 and 2, Byron
Station Units 1 and 2 Response to NRC Bulletin 90-01,
dated July 20, 1990.

Dear Dr. Murley:

The purpose of this letter is to provide the Dresden Station response to the requested actions of Bulletin 90-01 Supplement 1. The details of the Dresden response are contained in Attachment 1 and a tabular summary is provided in Attachment 2.

Dresden has a total of fourteen (14) transmitters within the scope of the referenced Bulletin. Based on transmitter maturity, operating pressure and Bulletin categorization, three (3) of these would require monthly enhanced monitoring; however, enhanced monitoring is currently being done on these transmitters (on a refuel outage interval) and at the present time, no drift is evident outside of the manufacturer's acceptance criteria. Monthly monitoring, therefore, will not be performed. These transmitters had been scheduled for replacement by the end of the next Unit 3 refueling outage, per the schedule established in response to the original Bulletin; however, due to the concerns raised by the Bulletin Supplement, Dresden's goal at this time is to replace the transmitters as soon as new replacements become available and plant conditions allow.

With the replacement of these three (3) transmitters, Dresden will be in full compliance with the recommended actions of the Bulletin. Commonwealth Edison will provide either a written confirmation that the three (3), non-mature, RPS/ESF Rosemount transmitters have been replaced or will provide a supplemental response to this Bulletin.

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To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respects these statements are not based on my personal knowledge, but on information furnished by other CECO employees, contractor employees, and/or consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

If there are any questions or comments, please contact me.

Sincerely,



David J. Chrzanowski
Generic Issues Administrator
Nuclear Regulatory Services

Attachments: Attachment 1 - Response to NRCB 90-01 SI Actions
Attachment 2 - Tabular Summary of Transmitter Status

cc: Regional Administrator-RIII
J. Stang, Project Manager-NRR/PDI III-2
M. Leach, Senior Resident Inspector (Dresden)

State of Ill, County of DuPage
Signed before me on this 5th day
of March, 1993 by [Signature]
Notary Public [Signature]

" OFFICIAL SEAL "
SANDRA C. LARA
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 6/25/94

Attachment 1

Dresden Response to NRCB 90-01 S1 Requested Actions

Requested Actions

1. Review Plant records and identify any Rosemount Model 1153 Series B, Model 1153 Series D, and model 1154 transmitters manufactured before July 11, 1989, that are use or may be used in the future in either safety-related systems or systems installed in accordance with 10 CFR 50.62 (the ATWS rule).

At the present time, there are fourteen (14) transmitters installed in the described systems. When the original Bulletin 90-01 was issued, Dresden identified fifty-two (52) transmitters installed in the plant which fell into the above scope (see Attachment A in Reference 2). Since that time, thirty-eight (38) of the fifty-two (52) transmitters have been replaced, leaving fourteen (14) transmitters within this scope. No additional transmitters installed since the original Bulletin was issued fall within this scope.

- a. Expediently replace, or monitor for the life of the transmitter on a monthly basis using an enhanced surveillance monitoring program, any transmitters that have a normal operating pressure greater than 1500 psi and that are installed in reactor protection trip systems, ESF actuation systems or ATWS systems.

Action for those transmitters that have not met the Rosemount psi-month threshold criterion should be expedited.

Dresden does not have any transmitters in this category.

At their discretion, licensees may monitor using an enhanced surveillance program at least once every refueling cycle, but not exceeding 24 months, transmitters in this category if the appropriate psi-month threshold criterion recommended by Rosemount has been reached, and the monitoring interval is justified based upon transmitter performance in service and its specific safety function.

Dresden does not have any transmitters in this category.

- b. Replace, or monitor for the life of the transmitter on a quarterly basis using an enhanced surveillance monitoring program, any transmitters that have a normal operating pressure greater than 1500 psi and that are used in safety-related applications but are not installed in reactor protection trip systems, ESF actuation systems, or ATWS systems.

Dresden does not have any transmitters in this category.

Attachment 1

Dresden Response to NRCB 90-01 SI Requested Actions
(continued)

At their discretion, licensees may monitor using an enhanced surveillance program at least once every refueling cycle, but not exceeding 24 months, transmitters in this category if the appropriate psi-month threshold criterion recommended by Rosemount has been reached, and the monitoring interval is justified based upon transmitter performance in service and its specific function.

Dresden does not have any transmitters in this category.

- c. [For BWRs] Replace, or monitor on a monthly basis using an enhanced surveillance monitoring program, until the transmitter reaches the appropriate psi-month threshold criterion recommended by Rosemount, any transmitters that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi, that are installed in reactor protection trip systems, ESF actuation systems or ATWS systems.

Three (3) of the fourteen (14) transmitters identified in the response to item 1 are in this category.

The Three (3) transmitters, transmitters 3-2389A, 3-2389C and 3-2389D, are installed in the HPCI system on Unit 3. These transmitters are three (3) of four (4) transmitters which provide a none-out-of-two-twice logic to isolate HPCI upon a low pressure condition (less than 80 psi reactor pressure). The normal HPCI system pressure is approximately 1200 psi; however, when HPCI is not in operation, these transmitters are exposed to full reactor pressure not in operation, these transmitters have been in service since 1986, (greater than 1000 psi). These transmitters have been in service since 1985. Five (5) calibrations have been performed on transmitters 3-2389A and 3-2389C and four (4) calibrations on 3-2389D. Transmitter 3-2389B was replaced on November 22, 1991, due to a zero shift limit date of April 6, 1992. Enhanced monitoring is currently being done on transmitters 3-2389A, 3-2389C and 3-2389D on a refuel outage interval. At the present time, no drift is evident outside of the manufacturers acceptance criteria; therefore, monthly monitoring will not be performed.

Transmitters 3-2389A, 3-2389C and 3-2389D has been scheduled for replacement sometime before, or during, the next Unit 3 refuel outage, D3R13, which is tentatively scheduled to begin in January 1993; however, due to the concerns raised by the Bulletin Supplement, Dresden's goal at this time is to replace the transmitters as soon as new replacements become available and plant conditions allow. The Instrument Maintenance Department is currently awaiting the return of transmitters which were previously removed and sent to Rosemount for refurbishment. When the refurbished transmitters are sent back from Rosemount, three (3) of the transmitters will be used as replacements for the three (3), HPCI transmitters. If the replacements cannot be performed with the Unit on-line, they will be done during D3R13 (Tracking #249-101-90-00102S1).

Attachment 1

Dresden Response to NRCB 90-01 S1 Requested Actions
(continued)

c. BWRs Response (continued)

On a case-by-case basis except for transmitters that initiate reactor protection or ATWS trips for high pressure or low water level, licensees may monitor using an enhanced surveillance program at least once every refueling cycle, but not exceeding 24 months, if sufficient justification is provided based upon transmitter performance in service and its specific safety function.

Dresden does not have any transmitters in this category.

- c. [For PWRs] Replace, or monitor at least once every refueling cycle, but not exceeding 24 months, using an enhanced surveillance program until the transmitter reaches the appropriate psi-month threshold criterion recommended by Rosemount, any transmitters that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi and that are installed in reactor protection trip systems, ESF actuation systems, or ATWS systems.

The PWR requirements are not applicable to Dresden Station.

- d. Replace, or monitor at least once every refueling cycle, but not exceeding 24 months, using an enhanced surveillance monitoring program until the transmitter reaches the appropriate psi-month threshold criterion recommended by Rosemount, any transmitters used in safety-related systems that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi, and that are not installed in reactor protection trip systems, ESF actuation systems, or ATWS systems.

Dresden does not have any transmitters in this category.

- e. At licensee discretion, exclude from the enhanced surveillance program any transmitters that have a normal operating pressure greater than 500 psi and less than or equal to 1500 psi that have reached the appropriate psi-month threshold criterion recommended by Rosemount (60,000 psi-months or 130,000 psi-months depending on the range code of the transmitter).

A high degree of confidence should be maintained for detecting failure of these transmitters caused by a loss of fill-oil and a high degree of reliability should be maintained for the function consistent with its safety significance.

Dresden does not have any transmitters in this category.

Attachment 1

Dresden Response to NRCB 90-01 SI Requested Actions
(continued)

- f. At licensee discretion, exclude from the enhanced surveillance program any transmitters that have a normal operating pressure less than or equal to 500 psi. A high degree of confidence should be maintained for detecting failure of these transmitters caused by a loss of fill-oil and a high degree of reliability should be maintained for the function consistent with its safety significance.

The remaining eleven (11) of the fourteen (14) transmitters identified in the response to item 1 are in this category.

Six (6) of the transmitters are installed on Unit 2. These transmitters are in the process of being replaced during the current Unit 2 Refuel Outage, D2R13, per the schedule established in response to the original Bulletin (Tracking #237-101-90-00101B).

The other five (5) transmitters are installed on Unit 3. These transmitters are scheduled for replacement sometime before, or during, D3R13 (Tracking #237-101-90-00101B). Regarding the detection of fill-oil losses, the transmitters are being monitored under the enhanced surveillance program (conducted on a refuel outage interval) established in response to the original Bulletin.

2. Evaluate the enhanced surveillance monitoring program to ensure that the program provides measurement data with an accuracy range consistent with that needed for comparison with manufacturer drift data criteria for determining degradation caused by a loss of fill-oil.

Dresden has an enhanced surveillance program that monitors, with required accuracy, the parameters indicative of a loss of fill oil condition.

Attachment 2

Summary of Transmitter Status for Dresden Station

Bulletin Category	Transmitter Pressure/Function	Maturity	Frequency of Enhanced Surveillance	Discussion/Comments
1.a	Normal Operating Pressure >1500 psi and transmitter is installed in RPS,ESF or ATWS systems	Not Mature, < 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
		Mature, > 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
1.b	Normal Operating Pressure >1500 psi. Transmitter is safety related but is <u>not</u> installed in RPS, ESF or ATWS systems	Not Mature, < 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
		Mature, > 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
1.c (BWR)	Operating pressure from 500 to 1500 psi and transmitter is in RPS, ESF or ATWS systems	Not Mature, < 60,000 psi*months	Monthly	Dresden has 3 transmitters in this category
			N/A	Dresden does not have any transmitters in this category
		Mature, > 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
1.c (PWR)	Operating pressure from 500 to 1500 psi and transmitter is in RPS, ESF or ATWS systems	Not Mature, < 60,000 psi*months	N/A	Not applicable to Dresden
		Mature, > 60,000 psi*months	N/A	Not applicable to Dresden
1.d	Operating pressure from 500 to 1500 psi and transmitter is <u>not</u> in RPS, ESF or ATWS systems but is safety related	Not Mature, < 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
1.e	Operating pressure from 500 to 1500 psi	Mature, > 60,000 psi*months	N/A	Dresden does not have any transmitters in this category
1.f	Operating pressure less than or equal to 500 psi	N/A	Exempt	Dresden has 11 transmitters in this category
2	Dresden has an enhanced surveillance monitoring program that provides measurement data with an accuracy range consistent for determining degradation caused by loss of fill oil.			