Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

November 23, 1994

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Dresden Nuclear Power Station Unit 2
Request for Schedular Exemption
From 10 CFR 50, Appendix J
Type B and C Test Interval
NRC Docket No. 50-237

Pursuant to 10 CFR 50.12(a), Commonwealth Edison (ComEd) requests a one time schedular exemption for Dresden Unit 2 from the two year test interval for Type B and C leak rate testing required by 10 CFR 50, Appendix J, Sections III.D.2(a) and III.D.3. The exemption is requested to increase the surveillance interval for volumes which cannot be local leak rate tested during plant operations in order to support the current refueling outage scheduled and to avoid the potential for an earlier reactor shutdown. It is requested that the proposed exemption request be approved no later than January 15, 1995.

ComEd has re-scheduled the Dresden Unit 2 Refuel Outage (D2R14) from January 1995 to mid 1995. Increasing the interval between refueling outages will cause the Station to exceed the 24 month Type B and C leak rate testing surveillance interval required by 10 CFR Appendix J. Therefore, an extension to the 24 month test interval is required for Type B and C leak rate tests which cannot be performed during reactor operation. The exemption requests a maximum extension of 180 days; the additional time provides for any unforeseen minor schedule changes to the Unit 2 refuel outage time table. If a separate forced outage was imposed to perform type B and C testing and operation resumed until the scheduled refuel outage, ComEd would be subject to "undue hardship or other costs" that result from increased radiological exposure and unit thermal cycling. In addition, ComEd has demonstrated good faith efforts to comply with the requirements, and the exemption would provide only temporary relief from the applicable regulation.

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As previously stated, ComEd has rescheduled the Dresden Unit 2 Refuel Outage from January to July 1995. We therefore, request a maximum exemption of up to 180 days for the most extreme case, from the two year Appendix J test interval for the Type B and C testable volumes listed in Attachments II and III to this letter. This exemption is requested because these volumes cannot be tested during reactor operation. ComEd will test the volumes listed in Attachment V should a forced outage of suitable duration occur prior to the refuel outage. Attachment IV provides the justification for not performing local leak rate testing on these volumes during reactor operation. Attachment VI outlines the testing methodology which will be used if forced outages occur. In addition, an administrative limit, 80% of 0.6La, will be established for the remainder of the Unit 2 operating cycle. This limit provides an added margin of safety to account for possible increases in the leakage rate of the untested volumes and will help ensure that the maximum pathway leakage limit does not exceed the Technical Specification limit of 0.6.La.

Attachments to this letter contain the following:

a) Attachment I provides justification for the exemption in accordance with the guidelines established in 10 CFR 50.12(a).

b) Attachments II and III identify the volumes for which the exemption is requested, the duration of the exemption required for each volume, and the minimum and maximum pathway leakage history for each volume.

c) Attachment IV provides justification for not performing local leak rate testing on volumes during reactor operation.

d) Attachment V lists the volumes which ComEd will test during reactor operation to provide a good faith effort of compliance and to reduce the number of volumes requiring exemption.

e) Attachment VI outlines the testing methodology which will be used if forced outages occur. This attachment also defines the methodology for tracking maximum pathway leakage during the remainder of the fuel cycle.

f) Attachment VII lists the balance of the volumes which do not require testing since their 24 month critical dates expire after the projected start of the rescheduled outage.

Please direct any questions you may have regarding this matter to this office.

Sincerely,

Peter L. Piet
Nuclear Licensing Administrator

Attachments: I through VII

cc: J.B. Martin, Regional Admnistrator - RIII
J.F. Stang, Project Manager - NRR
M.N. Leach, Senior Resident Inspector - Dresden
Office of Nuclear Facility Safety - IDNS

ATTACHMENT I

JUSTIFICATION FOR SCHEDULAR EXEMPTION FROM

10 CFR 50, APPENDIX J

TYPE B AND C TEST FREQUENCY

EXEMPTION:

Commonwealth Edison Company requests a one time schedular exemption from the 24 month Type B and C local leak rate test interval required by 10 CFR 50, Appendix J, Sections III.D.2(a) and III.D.3. This exemption applies only to Dresden Unit 2 and requires a maximum 180 day extension for the Type B and C testable volumes listed in Attachments II and III.

DISCUSSION:

The original shutdown date for the fourteenth Dresden Unit 2 refuel outage (D2R14) was September 10, 1994. The current cycle was extended to March 4, 1995, however, due to the extended Unit 2 forced outage, D2F23, the revised date for D2R14 is mid-1995. Increasing the interval between refueling outages will cause the Station to exceed the 24 month Type B and C leak rate testing surveillance interval required by 10 CFR 50, Appendix J. Therefore, an extension to the 24 month test interval is requested for those Type B and C leak rate tests which cannot be performed during reactor operation. The exemption requests a maximum extension of 180 days; the additional time provides for any unforseen minor schedule changes to the Unit 2 refuel outage time table. If a separate forced outage was imposed to perform Type B and C testing and operation resumed until the scheduled refuel outage, Commonwealth Edison would be subject to "undue hardship or other costs" that result from increased radiological exposure and unit thermal cycling. In addition, Commonwealth Edison has demonstrated good faith efforts to comply with the requirements, and the exemption would provide only temporary relief from the applicable regulation.

BASIS:

As discussed in the following sections, the requested exemption meets the three necessary criteria of 10 CFR 50.12(a)(1). In addition, there are special circumstances present which qualify for consideration for an exemption per the criteria established in 10 CFR 50.12(a)(2).

A. Criteria for Granting Exemptions are Met per 10 CFR Part 50.12(a)(1):

1. The Requested Exemptions and the Activities Which Would be Allowed Thereunder are Authorized by Law

If the criteria established in 10 CFR 50.12(a) are satisfied, as they are in this case, and if no other prohibition of law exists to preclude the activities which would be authorized by the requested exemption, and there are no such prohibition, the Commission is authorized by law to grant this exemption request. [1]

[1] See U.S. vs. Allegheny-Ludlum Steel Corp., 406 U.S. 742, 755 (1972).

2. The Requested Exemption will Not Present Undue Risk to the Public

As stated in 10 CFR 50, Appendix J, the purpose of primary containment leak rate testing is to ensure that the leakage through primary containment shall not exceed the leakage allowed by the Technical Specifications or associated basis and to ensure that proper maintenance and repair is performed throughout the service life of the containment boundary components. The requested exemption is consistent with this intent in that it represents a one time schedular exemption of short duration for Type B and C volumes which must be tested during a refuel outage (Attachment II) and those volumes which must be tested during cold shutdown (Attachment III). Attachment IV provides justification for not testing these volumes during reactor operation. All remaining leak rate tests will still be performed to assess compliance with Technical Specification requirements and to assure that any required maintenance or repair work is performed. To reduce the number of volumes which need an exemption, Commonwealth Edison will test the volumes listed in Attachment V during reactor operation prior to exceeding the 2-year surveillance interval. In addition, Attachment III lists those volumes that will be considered for testing should a forced outage occur. Attachment VI outlines the testing methodology which will be used if forced outages occur. In order to provide an added margin of safety and to account for possible increases in the leakage rates of untested volumes during the relatively short period of the exemption, Dresden Station will impose an administrative limit for maximum pathway leakage of 80% of 0.60 L_a for the remaining Unit 2 fuel cycle (ref. Attachment VI).

Past Unit 2 local leak rate test data, for the volumes shown in Attachments II and III, have in general demonstrated good leak rate test results. The current maximum pathway leakage rate for Dresden Unit 2, as determined through Type B and C leak rate testing, is 309.46 scfh. This value is approximately 63.4% of the Technical Specification limit of 488.452 scfh (0.60 L_a).

The D2R13 as-left total minimum pathway leakage rate for Type B and C testable penetrations was 173.25 scfh. This value is approximately 28% of the Technical Specification limit of 610.56 scfh (0.75 L_a). By using the minimum pathway methodology, a conservative measurement of the actual leakage expected through a pathway under post accident conditions can be determined. In addition, the D2R13 as-left Integrated Leak Rate Test, completed on May 14, 1993, indicated that the primary containment overall integrated leakage rate, which obtains the summation of all potential leakage paths including containment welds, valves, fittings, and penetrations, was 493.36 scfh. This value is the sum of the 95% upper confidence limit calculated leak rate of 416.40 scfh plus the leakage rate of all nonvented pathways and the leakage compensation for the change in the drywell sump levels. This integrated leakage value is approximately 80.8% of the limit specified in the Technical Specifications (0.75 L_a).

A station imposed limit of 80% of the Technical Specification for maximum pathway leakage along with the testing of volumes which can be tested during operation provide a basis for showing that the probability of exceeding the off-site dose rates established in 10 CFR 100 will not be increased by extending the current 24 month

Type B and C testing interval a maximum of 180 days. Therefore, this exemption will not "present an undue risk to the public health and safety."

3. The Requested Exemptions Will Not Endanger the Common Defense and Security

The common defense and security are not in any way compromised by this exemption request.

B. At least One of the Special Circumstances are Present Per 10 CFR 50.12(a)(2)

1. The Requested Exemptions Will Avoid Undue Hardship or Costs

The requested schedular extension is required to prevent a forced shutdown of Dresden Unit 2. Preparations for a refueling outage are proceeding based on a scheduled shutdown in mid-1995. An earlier forced outage would present undue hardship and costs in the form of an increased radiological exposure. Furthermore, a heatup and cooldown cycle would be eliminated by increasing the Appendix J test interval. Because the requested exemption does not jeopardize the health and safety of the public, as previously discussed, its approval is warranted in order to prevent a shutdown. Commonwealth Edison does not believe that when Appendix J was implemented that extended outages or extended operating cycles, such as those associated with 18 to 24 month fuel cycles or extended coast-downs, were foreseen.

The Dresden Unit 2 situation therefore represents a special circumstance per item (v) of 10 CFR 50.12(a)(2) i.e., "Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated." Exemptions to Appendix J requirements have subsequently been granted in such cases.[2]

2. The Requested Exemptions Provide Only Temporary Relief and the Licensee Has Made Good Faith Efforts to Comply

As discussed above, the exemption request is for a short duration relative to the 24 month requirement. All volumes that can be safely tested during reactor operation will be tested (Attachment V). Volumes which cannot be tested during operation but can be tested during cold shutdown (Attachment III) will be considered for testing should a forced outage occur. The volumes selected for testing will be based upon the expected duration of the shutdown and the time required to prepare the volumes for testing.

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[2] (a) Docket No. 50-219, Oyster Creek Nuclear Generating Station, Exemption of 10 CFR Part 50, Appendix J - Extension of the Type B and C leak rate test period (Tac No. 76137).

(b) Docket No. 50-245, B13770, Millstone Nuclear Generating Station, Unit No. 1, 10 CFR Part 50, Appendix J schedule exemption from Type B and C leak rate test requirements (Tac No. 79700).

(c) Docket No. 50-237, Dresden Nuclear Power Station, Unit No. 2, 10 CFR Part 50, Appendix J Schedule exemption from type B and C leak rate test requirements (Tac No. M83535).

Volumes not tested during a cold shutdown will be considered for testing during any subsequent cold shutdowns that may occur prior to the D2R14 refueling outage. This meets an additional criterion for a special circumstance per item (v) of 10CFR50.12(a)(2), i.e., "The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation." Since the startup from D2R13 in May of 1993, Dresden Station has tested 27 LLRT volumes. Included in these volumes are valves in the Main Steam, Feedwater, High Pressure Coolant Injection (HPCI) and Drywell Ventilation Systems (Attachment VII). ComEd believes that the testing performed demonstrates a good faith effort.

ATTACHMENT II
VOLUMES WHICH MUST BE TESTED DURING A REFUEL OUTAGE

Critical Date	Maximum # of Days For Exemption	Test Volume	D2R13 Max Pathway As Found/ As Left (scfh)	D2R13 Min Pathway As Found/ As Left (scfh)	D2R13 Valves Repaired	D2R12 Max Pathway As Found/ As Left (scfh)	D2R12 Min Pathway As Found/ As Left (scfh)	D2R12 Valves Repaired
1/17/95	180	BELLOWS PENETRATION X-105A	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-105B	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-105C	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-105D	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-106	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-107A	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-107B	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-109B	0.47/0.47	0.24/0.24		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-111A	0.14/0.14	0.07/0.07		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-111B	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/17/95	180	BELLOWS PENETRATION X-115A	0.10/0.10	0.05/0.05		0.40/0.40	0.20/0.20	
1/17/95	180	BELLOWS PENETRATION X-116A	3.24/3.24	1.62/1.62		3.70/3.70	1.85/1.85	
1/17/95	180	BELLOWS PENETRATION X-116B	2.24/2.24	1.12/1.12		3.30/3.30	1.65/1.65	
1/17/95	180	BELLOWS PENETRATION X-123	0.15/0.15	0.08/0.08		0.30/0.30	0.15/0.15	
1/17/95	180	BELLOWS PENETRATION X-124	0.39/0.39	0.20/0.20		0.40/0.40	0.20/0.20	
1/17/95	180	BELLOWS PENETRATION X-126	4.01/4.01	2.01/2.01		0.10/0.10	0.05/0.05	
1/18/95	179	BELLOWS PENETRATION X-108A	0.61/0.61	0.31/0.31		1.60/1.60	0.80/0.80	
1/18/95	179	BELLOWS PENETRATION X-130	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/18/95	179	BELLOWS PENETRATION X-147	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
1/20/95	177	205-2-7 & FLANGE	NOTE 1/3.31	3.31/NOTE 2		UND/7.90	NOTE 2	205-2-7
1/29/95	168	DRYWELL HEAD MANWAY DOUBLE GASKET SEAL	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	

ATTACHMENT II
VOLUMES WHICH MUST BE TESTED DURING A REFUEL OUTAGE

Critical Date	Maximum # of Days For Exemption	Test Volume	D2R13 Max Pathway As Found/ As Left (scfh)	D2R13 Min Pathway As Found/ As Left (scfh)	D2R13 Valves Repaired	D2R12 Max Pathway As Found/ As Left (scfh)	D2R12 Min Pathway As Found/ As Left (scfh)	D2R12 Valves Repaired
2/2/95	164	1501-25A & 26A	NOTE 1	2.02/2.02		NOTE 1	0.50/0.50	
2/18/95	148	1101-1 & 16	0.57/NOTE 1	NOTE 2/0.57		0.10/0.10	NOTE 2	
2/27/95	139	1101-1 & 15	NOTE 1/1.71	0.10/NOTE 2	1101-15	NOTE 1	0.10/0.10	
3/14/95	124	1501-25B & 26B	63.81/NOTE 1	NOTE 2/4.32	1501-25B	NOTE 1	0.10/0.10	
3/16/95	122	3703 & 3706	18.22/8.16	7.56/4.08	3703	14.60/14.60	7.30/7.30	
3/18/95	120	1501-22B, 26B & 1001-5B	NOTE 1/13.28	5.06/NOTE 2		1.30/1.30	NOTE 2	
3/19/95	119	1501-22A, 26A & 1001-5A	25.70/4.48	NOTE 2	1501-23A	1.50/1.50	NOTE 2	
3/20/95	118	1001-1A, 1B, 2A, 2B & 2C	458.50/27.40	229.25/13.70	1001-1A 1001-1B	232.60/30.60	30.60/0.10	1001-1A 1001-1B
4/15/95	92	205-2-4 & FLANGE	UND/NOTE 1	NOTE 2/2.84	205-2-4	NOTE 1	1.00/1.00	
5/12/95	65	DRYWELL HEAD DOUBLE GASKET SEAL	0.20/0.10	0.10/0.05		0.10/0.10	0.05/0.05	

Note 1: A maximum pathway value cannot be assigned because the other valve in series exhibited a higher leakage rate. Therefore, the maximum pathway value for this volume was assigned to the other valve in series.

Note 2: A minimum pathway value cannot be assigned because the other valve in series exhibited a lower leakage rate. Therefore, the minimum pathway value for this volume was assigned to the other valve in series.

ATTACHMENT III
VOLUMES WHICH MUST BE TESTED DURING COLD SHUTDOWN

Critical Date	Maximum # of Days For Exemption	Test Volume	D2R13 Max Pathway As Found/ As Left (scfh)	D2R13 Min Pathway As Found/ As Left (scfh)	D2R13 Valves Repaired	D2R12 Max Pathway As Found/ As Left (scfh)	D2R12 Min Pathway As Found/ As Left (scfh)	D2R12 Valves Repaired
2/1/95	165	1402-24A & 25A	1.52/1.52	0.76/0.76		0.10/0.10	0.05/0.05	1402-24A 1402-25A
2/1/95	165	1402-24B & 25B	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	1402-24B 1402-25B
2/18/95	148	SHEAR LUG INSP HATCH SEAL #1	1.00/1.00	0.50/0.50		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #2	0.17/0.17	0.09/0.09		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #3	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #4	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #5	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #6	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #7	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
2/18/95	148	SHEAR LUG INSP HATCH SEAL #8	4.84/4.84	2.42/2.42		0.10/0.10	0.05/0.05	
2/19/95	147	TIP BALL VALVE A	2.43/2.43	2.43/2.43		2.60/2.60	2.60/2.60	
2/19/95	147	TIP BALL VALVE B	1.62/1.62	1.62/1.62		1.50/1.50	1.50/1.50	
2/19/95	147	TIP BALL VALVE C	0.61/0.61	0.61/0.61		1.00/1.00	1.00/1.00	
2/19/95	147	TIP BALL VALVE D	3.14/3.14	3.14/3.14		3.00/3.00	3.00/3.00	
2/19/95	147	TIP BALL VALVE E	2.53/2.53	2.53/2.53		3.20/3.20	3.20/3.20	
2/26/95	140	220-44 & 45	8.63/8.63	4.32/4.32		3.00/3.00	1.50/1.50	
4/3/95	104	1201-1, 1A, 2 & 3	67.29/5.21	33.65/2.61	1299-4 1299-5	7.20/17.30	3.60/8.65	1201-1A
4/3/95	104	1501-18A & 19A	1.80/1.22	0.90/0.61		2.00/0.10	1.00/0.05	1501-18A
4/5/95	102	1501-18B & 19B	1.67/2.45	0.84/1.23		78.40/7.30	39.20/3.65	1501-18B
4/18/95	93	399-506, 220-112A & 112B	6.54/6.54	3.27/3.27		0.30/0.10	0.15/0.05	
4/25/95	82	220-57B & 58B	UND/3.52	NOTE 2	220-58B	NOTE 1/9.30	0.30/NOTE 2	220-58B
4/25/95	82	4327-500	0.87/0.87	0.44/0.44		0.10/0.10	0.05/0.05	

ATTACHMENT III
VOLUMES WHICH MUST BE TESTED DURING COLD SHUTDOWN

Critical Date	Maximum # of Days For Exemption	Test Volume	D2R13 Max Pathway As Found/ As Left (scfh)	D2R13 Min Pathway As Found/ As Left (scfh)	D2R13 Valves Repaired	D2R12 Max Pathway As Found/ As Left (scfh)	D2R12 Min Pathway As Found/ As Left (scfh)	D2R12 Valves Repaired
4/25/95	82	4327-502	3.14/3.14	1.57/1.57		0.10/0.10	0.05/0.05	
4/25/95	82	4630-500	3.55/3.55	3.55/3.55		2.00/2.00	1.00/1.00	
4/27/95	80	4799-514	40.52/3.35	40.52/3.35	4799-514	2.80/2.80	2.80/2.80	
4/29/95	78	220-57B & 62B	NOTE 1	271.30/2.14	220-62B	UND/NOTE 1	NOTE 2/4.90	220-62B
4/30/95	77	3702 & 3799-128	NOTE 1	5.37/2.99	3702	131.10/12.50	NOTE 2	3702
4/30/95	77	3769-500	14.20/3.00	NOTE 2	3769-500	NOTE 1	0.40/0.40	
5/1/95	76	2301-4 & 5	2.48/2.02	1.24/1.01		6.90/2.20	3.45/1.10	2301-4
5/2/95	75	1301-3 & 4	1.18/0.10	0.59/0.05		114.90/0.10	57.45/0.10	1301-3
5/3/95	74	1301-17 & 20	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
5/4/95	73	220-1 & 2	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
5/5/95	72	1301-1 & 2	2.41/2.32	1.21/1.16		4.50/1.00	2.25/0.05	1301-1
5/9/95	68	1601-21, 22, 55 , 56 & 8502-500	651.80/0.67	0.35/0.34		0.70/11.10	0.35/5.55	1601-22
5/9/95	68	1601-57, 58 & 59	0.10/0.10	0.05/0.05		0.10/0.10	0.05/0.05	
5/11/95	66	2301-34 & 71	32.54/14.70	32.54/14.70	2301-34 2301-71	34.60/5.10	34.60/5.10	2301-71
5/16/95	61	4722 & 4799-530	11.32/1.75	5.66/0.87	4799-530	6.00/6.00	3.00/3.00	

Note 1: A maximum pathway value cannot be assigned because the other valve in series exhibited a higher leakagae rate. Therefore, the maximum pathway value for this volume was assigned to the other valve in series.

Note 2: A minimum pathway value cannot be assigned because the other valve in series exhibited a lower leakage rate. Therefore, the minimum pathway value for this volume was assigned to the other valve in series.

ATTACHMENT IV
JUSTIFICATION FOR NOT TESTING VOLUMES DURING OPERATION

VOLUME	BASIS
220-1 & 2	Drywell access is required in order to test.
220-44 & 45	Inboard isolation valve is exposed to reactor pressure during operation.
220-57B & 58B	Drywell access is required in order to test.
220-57B & 62B	Drywell access is required in order to position valves for testing.
399-506, 220-112A & 112B	Drywell access is required in order to position valves for testing.
1201-1, 1A, 2 & 3	Drywell access is required in order to test.
1301-1 & 2	Inboard isolation valve is exposed to reactor pressure during operation.
1301-3 & 4	Inboard isolation valve is exposed to reactor pressure during operation.
1301-17 & 20	Inboard isolation valve is exposed to reactor pressure during operation.
1402-24A & 25A	Drywell access is required in order to position valves for testing.
1402-24B & 25B	Drywell access is required in order to position valves for testing.
1501-18A & 19A	Testing this volume during operation requires one loop of the LPCI system to be inoperable, which would be contrary to safe operating philosophy.
1501-18B & 19B	Testing this volume during operation requires one loop of the LPCI system to be inoperable, which would be contrary to safe operating philosophy.
1601-21, 23, 55, 56, 8502-500	Testing this volume during operation requires drywell vent, purge, and Nitrogen make-up to become inoperable, and could cause difficulty with adherence to drywell/torus differential pressure Technical Specification requirements.
1601-57, 58 & 59	Testing this volume during operation requires drywell vent, purge, and Nitrogen make-up to become inoperable, and could cause difficulty with adherence to drywell/torus differential pressure Technical Specification requirements.

ATTACHMENT IV
JUSTIFICATION FOR NOT TESTING VOLUMES DURING OPERATION

VOLUME	BASIS
2301-4 & 5	Testing this volume during operation requires the HPCI System to be inoperable, which would be contrary to safe operating philosophy.
2301-34 & 71	Testing this volume during operation requires the HPCI System to be inoperable, which would be contrary to safe operating philosophy.
3702 & 3799-128	Drywell access is required in order to position valves for testing.
3769-500	Drywell access is required in order to test.
4327-500	Drywell access is required in order to test.
4327-502	Drywell access is required in order to test.
4630-500	Drywell access is required in order to test.
TIP BALL VALVES A, B, C, D & E	Drywell access is required in order to test.
4722 & 4799-530	Testing this volume during operation requires the Drywell Pneumatics System to be inoperable which in turn would leave all air-operated valves in the drywell (MSIVs, Target Rock Safety/Relief) inoperable.
4799-514	Drywell access is required in order to test.
SHEAR LUG INSP HATCH SEALS #1 THROUGH #8	Drywell access is required in order to test.
. . . . . **(Refuel Outage Only)**	
205-2-4 & FLANGE	The flanged spool piece from the vessel head must be removed and a blind flange installed in order to perform the test.
205-2-7 & FLANGE	The flanged spool piece from the vessel head must be removed and a blind flange installed in order to perform the test.
1001-1A, 1B, 2A, 2B & 2C	Fuel must be removed from the reactor in order to isolate and drain the Shutdown Cooling System.
1101-1 & 15	Fuel must be removed from the reactor in order to take the Standby Liquid Control System out of service.
1101-1 & 16	Fuel must be removed from the reactor in order to take the Standby Liquid Control System out of service.
1501-25A & 26A	Fuel must be removed from the reactor in order to isolate and drain the Shutdown Cooling loop.

ATTACHMENT IV
JUSTIFICATION FOR NOT TESTING VOLUMES DURING OPERATION

VOLUME	BASIS
1501-22A, 26A & 1001-5A	Fuel must be removed from the reactor in order to isolate and drain the Shutdown Cooling loop.
1501-25B & 26B	Fuel must be removed from the reactor in order to isolate and drain the Shutdown Cooling loop.
1501-22B, 26B & 1001-5B	Fuel must be removed from the reactor in order to isolate and drain the Shutdown Cooling loop.
3703 & 3706	Repairing valve 3703 would require isolating cooling water to the Shutdown Cooling Pumps.
BELLOWS PENETRATIONS: X-105A, X-105B, X-105C, X105D, X-106, X-107A, X-107B, X-108A, X-109B, X-111A, X-111B, X-115A, X-116A, X-116B, X-123, X-124, X-126, X-130, X-147	A refueling outage is required in order to implement the bellows testing program approved under the Dresden Station Units 2 and 3 and Quad Cities Station Units 1 and 2 Request for Exemption from 10 CFR 50, Appendix J Type B Testing Requirement for Two-Ply Containment Penetration Bellows. Reference: J.L. Schrage to Dr. T.E. Murley Letter, dated 11/12/91.
DRYWELL HEAD DOUBLE GASKET SEAL	The reactor vessel shield blocks must be removed in order to perform the test.
DRYWELL HEAD MANWAY DOUBLE GASKET SEAL	The reactor vessel shield blocks must be removed in order to perform the test.

ATTACHMENT V
VOLUMES WHICH CAN BE TESTED DURING OPERATION

CRITICAL DATE	TEST VOLUME
1/21/95	LT 1626
1/22/95	ELECTRICAL PENETRATION X-200A
1/22/95	ELECTRICAL PENETRATION X-200B
1/22/95	ELECTRICAL PENETRATION X-203B
1/22/95	ELECTRICAL PENETRATION X-205B
1/22/95	ELECTRICAL PENETRATION X-205E
1/23/95	8501-3A & 3B
1/23/95	8501-5A & END
1/23/95	8501-5B & END
1/23/95	9206A & END
1/23/95	9206B & END
1/25/95	2599-2A & 23A
1/25/95	2599-3A & 24A
1/25/95	2599-3B & 24B
1/25/95	DOUBLE GASKET SEAL FOR 1601-32C
1/25/95	DOUBLE GASKET SEAL FOR 1601-32D
1/25/95	DOUBLE GASKET SEAL FOR 1601-32E
1/25/95	DOUBLE GASKET SEAL FOR 1601-32F
1/25/95	DOUBLE GASKET SEAL FOR 1601-33E
1/26/95	ELECTRICAL PENETRATION X-202B
1/26/95	ELECTRICAL PENETRATION X-202D
1/26/95	ELECTRICAL PENETRATION X-202F
1/26/95	ELECTRICAL PENETRATION X-202J
1/26/95	ELECTRICAL PENETRATION X-202N
1/26/95	DOUBLE GASKET SEAL FOR 1601-32A
1/26/95	DOUBLE GASKET SEAL FOR 1601-32B
1/26/95	DOUBLE GASKET SEAL FOR 1601-33B
1/26/95	DOUBLE GASKET SEAL FOR 1601-33C
1/26/95	DOUBLE GASKET SEAL FOR 1601-33D
1/26/95	DOUBLE GASKET SEAL FOR 1601-33F
1/27/95	2599-4B & 5B
1/27/95	9207A & END
1/27/95	9207B & END
1/27/95	9208A & END

ATTACHMENT V
VOLUMES WHICH CAN BE TESTED DURING OPERATION

CRITICAL DATE	TEST VOLUME
1/27/95	9208B & END
1/27/95	ELECTRICAL PENETRATION X-202BB
1/27/95	ELECTRICAL PENETRATION X-202Q
1/27/95	ELECTRICAL PENETRATION X-202S
1/27/95	ELECTRICAL PENETRATION X-202X
1/27/95	ELECTRICAL PENETRATION X-204E
1/27/95	ELECTRICAL PENETRATION X-204H
1/28/95	2499-1A & 2A
1/28/95	2499-28A & 29A
1/29/95	2499-3A & 4A
1/29/95	2499-3B & 4B
1/29/95	2499-28B & 29B
1/29/95	ELECTRICAL PENETRATION X-204P
1/29/95	ELECTRICAL PENETRATION X-204Q
1/29/95	ELECTRICAL PENETRATION X-204S
1/29/95	ELECTRICAL PENETRATION X-204T
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136A
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136B
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136C
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136D
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136E
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136F
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136G
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136H
1/29/95	TIP MONITOR FLANGE SEAL FOR X-136J
2/4/95	DW AIR SAMPLE VALVES
2/16/95	2499-1B & 2B
2/23/95	ELECTRICAL PENETRATION X-202W
3/8/95	4720 & 4721
3/15/95	1699-65A & FLANGE
3/15/95	1699-65B & FLANGE
3/23/95	2599-2B & 23B
4/6/95	BELLOWS PENETRATION X-125
4/13/95	ELECTRICAL PENETRATION X-203A

ATTACHMENT V
VOLUMES WHICH CAN BE TESTED DURING OPERATION

CRITICAL DATE	TEST VOLUME
4/26/95	ELECTRICAL PENETRATION X-200C
4/27/95	DOUBLE GASKET SEAL FOR X-135E
5/9/95	1601-20A & 31A
5/9/95	1601-20B & 31B
5/10/95	9205A & END
5/10/95	9205B & END
5/10/95	8501-1A & END
5/10/95	8501-1B & END
5/19/95	BELLOWS PENETRATION X-113
5/19/95	BELLOWS PENETRATION X-149A
5/19/95	BELLOWS PENETRATION X-149B
5/19/95	CRD HATCH DOUBLE GASKET SEAL
5/21/95	"A" H2/O2 Loop
5/22/95	"B" H2/O2 Loop

ATTACHMENT VI

Methodology for Leak Rate Testing

Attachment III lists those volumes that will be considered for testing should a forced outage occur. The volumes selected for testing will be based upon the expected duration of the shutdown and the time required to prepare the volumes for testing.

Volumes not tested during a cold shutdown will be considered for testing during any subsequent cold shutdowns that may occur prior to the D2R14 refueling outage. If no other cold shutdowns occur, the volumes will be tested during the D2R14 refueling outage.

In order to ensure that the Technical Specification maximum pathway leakage limit of 0.60 L_a is not exceeded during the course of the exemption, an administrative limit of 80% of 0.60 L_a has been established for the remainder of the cycle. This limit provides a margin of safety to account for any possible increases in the leakage rates of volumes that cannot be tested. This will help ensure that the maximum pathway leakage does not exceed the Technical Specification limit. However, Dresden Station will perform the action requirements of Technical Specifications should the administrative limit be exceeded.

The current maximum pathway leakage for Unit 2 is 309.46 scfh, which is 63.4% of the Technical Specification maximum pathway leakage limit. This number is based on the sum of the as-left maximum pathway leakage rates obtained from all Type B and Type C tests. The ongoing changes to the maximum path leakage will be tracked as described below.

As each volume is tested throughout the course of the exemption, the current as-found maximum pathway leakage rate for a volume will be subtracted from the as-left maximum pathway leakage rate for that volume. This difference will then be subtracted from the
as-left maximum pathway sum of all Type B and Type C tests to obtain the current maximum pathway sum of leakage rates. This methodology is represented in the following equation:

$$max = x - (y - z)$$

Where:

max = Current maximum pathway sum of leakage rates for Type B and Type C tests

x = As-left maximum pathway sum of leakage rates for Type B and Type C tests

y = Previous as-left maximum pathway leakage rate for the volume tested

z = Current as-found maximum pathway leakage rate for the volume tested

If at any time the current maximum path leakage rate is found to exceed the administrative limit, corrective actions will be taken to bring the leakage rate back below the limit.

ATTACHMENT VII
BALANCE OF VOLUMES

CRITICAL DATE	TEST VOLUME
11/20/95	203-1C & 203-2C
11/20/95	203-1B & 203-2B
11/22/95	203-1D & 203-2D
11/23/95	203-1A & 203-2A
11/26/95	2001-5 & 6
11/27/95	2001-105 & 106
6/1/96	2599-4A & 5A
8/15/96	DOUBLE GASKET SEAL FOR 1601-33A
8/26/96	1601-23, 24, 60, 61, 62 & 63
8/31/96	1501-27B & 28B
9/14/96	2301-45
9/15/96	1501-27A & 28A
9/27/96	E. TORUS HATCH DOUBLE GASKET SEAL
9/27/96	W. TORUS HATCH DOUBLE GASKET SEAL
10/28/96	220-57A & 58A
10/28/96	220-57A & 62A
11/9/96	299-116A & 97A
11/9/96	299-116A & 99A
11/9/96	299-116B & 97B
11/9/96	299-116B & 99B
11/9/96	299-117A & 98A
11/9/96	299-117A & 100A
11/9/96	299-117B & 98B
11/9/96	299-117B & 100B
11/9/96	2301-74 & FLANGE
11/10/96	HPCI TURBINE EXHAUST LINE DOUBLE GASKET SEAL
11/11/96	DRYWELL EQUIPMENT HATCH DOUBLE GASKET SEAL