

Post Accident Sample Panel to  
Containment Floor and Equipment  
Sump A

TABLE 3.6-1 (Continued)

SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS

<u>PENETRATION NUMBER</u>	<u>SERVICE</u>	<u>RELEASE LOCATION</u>	<u>TEST TYPE</u>
M386	Containment Air Release	Auxiliary Building	Type C
M204	Containment Air Addition	Auxiliary Building	Type C
M316	Int. Fire Protection Header - Hose Racks	Auxiliary Building	Type C
M337	Demineralized Water	Auxiliary Building	Type C
M220	Instrument Air	Auxiliary Building	Type C
M219	Station Air	Auxiliary Building	Type C
M215	Breathing Air	Auxiliary Building	Type C
M329	Reactor Coolant Pump Motor Oil Fill	Auxiliary Building	Type C
M361	Int. Fire Protection Header - Sprinklers	Auxiliary Building	Type C
M119	Containment Purge Exhaust	Auxiliary Building	Type C
M331	Nitrogen Supply to Cold Leg Accumulators	Auxiliary Building	Type C
M322	Safety Injection Test Line	Auxiliary Building	Type C
<del>M454</del>	<del>UHI Test Line</del>	Auxiliary Building	Type C <del>Note 1</del>
M328 <del>X</del>	Component Cooling to Reactor Vessel Support and RCP Coolers	Auxiliary Building	Type C

\*Not applicable for Units 1, <sup>and 2</sup> until after the <sup>third and second</sup> ~~first~~ refueling outages, respectively.  
~~Note 1. Upon capping of penetrations associated with deletion of UHI, this specification is no longer applicable.~~

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M375\*

PENETRATION NUMBER

SERVICE

RELEASE LOCATION

TEST TYPE

M386

Containment Air Release

Auxiliary Building

Type C

M204

Containment Air Addition

Auxiliary Building

Type C

M316

Int. Fire Protection Header -  
Hose Racks

Auxiliary Building

Type C

M337

Demineralized Water

Auxiliary Building

Type C

M220

Instrument Air

Auxiliary Building

Type C

M219

Station Air

Auxiliary Building

Type C

M215

Breathing Air

Auxiliary Building

Type C

M329

Reactor Coolant Pump Motor Oil Fill

Auxiliary Building

Type C

M361

Int. Fire Protection Header -  
Sprinklers

Auxiliary Building

Type C

M119

Containment Purge Exhaust

Auxiliary Building

Type C

M331

Nitrogen Supply to Cold Leg  
Accumulators

Auxiliary Building

Type C

M322

Safety Injection Test Line

Auxiliary Building

Type C

~~M454~~

~~UHI Test Line~~

Auxiliary Building

Type C ~~Note 1~~

M328~~X~~

Component Cooling to Reactor  
Vessel Support and RCP Coolers

Auxiliary Building

Type C

CATAWBA - UNITS 1 & 2

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Amendment No. 25 (Unit 1)  
Amendment No. 25 (Unit 2)

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TABLE 3.6-2a (Continued)

UNIT 1 CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (s)</u>
1. Phase "A" Isolation (Continued)		
KC-305B#	Excess Letdown Hx Supply Containment Isolation (Outside)	<20
KC-315B#	Excess Letdown Hx Return Header Containment Isolation (Outside)	<20
KC-320A#	NCDT Hx Supply Hdr Containment Isolation (Outside)	<20
KC-332B#	NCDT Hx Return Hdr Containment Isolation (Inside)	<20
KC-333A#	NCDT Hx Return Hdr Containment Isolation (Outside)	<20
KC-429B	RB Drain Header Inside Containment Isolation	<10
KC-430A	RB Drain Header Outside Containment Isolation	<10
NB-260B	Reactor Makeup Water Tank to Flush Header	<10
NC-53B	Nitrogen to Pressurizer Relief Tank #1 Containment Isolation Outside	<10
NC-54A	Nitrogen to Pressurizer Relief Tank #1 Containment Isolation Inside	<10
NC-56B	RMW Pump Disch Cont Isolation	<10
NC-195B	NC Pump Motor Oil Containment Isolation Outside	<10
NC-196A	NC Pump Motor Oil Containment Isolation Inside	<10
NF-228A	Unit 1 Air Handling Units Glycol Supply Containment Isolation Outside	<10
NF-233B	Unit 1 Air Handling Units Glycol Return Containment Isolation Inside	<10
NF-234A	Unit 1 Air Handling Units Glycol Return Containment Isolation Outside	<10
NI-47A	Accumulator N <sub>2</sub> Supply Outside Containment Isolation	<10
NI-95A	Test Hdr Inside Containment Isolation	<10
NI-96B	Test Hdr Outside Containment Isolation	<10
NI-120B	Safety Injection Pump to Accumulator Fill Line Isolation	<10
NI-122B#	Hot Leg Injection Check INI124, INI128 Test Isolation	<10
NI-154B#	Hot Leg Recirculation Check INI125, INI129 Test Isolation	<10
NI-255B	UHI Check Valve Test Line Isolation	<10
NI-258A	UHI Check Valve Test Line Isolation	<10
NI-264B	UHI Check Valve Test Line Outside Containment Isolation	<10

Note 1

~~Note 1: Upon capping of penetrations associated with deletion of UHI, these specifications are no longer applicable.~~

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Amendment No. 23 (Unit 1)  
23 (Unit 2)



NM-438A\*\*\*

Liquid Sample Panel Return Line Outside Containment Isolation

≤10

TABLE 3.6-2a (Continued)

UNIT 1 CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (s)
1. Phase "A" Isolation (Continued)		
NI-266A	UHI Check Valve Test Line Inside Containment Isolation	<10
NI-267A	UHI Check Valve Test Line Inside Containment Isolation	<10
NI-153A#	Hot Leg Injection Check NI156, NI159 Test Isolation	<10
NM-3A	Pressurizer Liquid Sample Line Inside Containment Isolation	<10
NM-6A	Pressurizer Steam Sample Line Inside Containment Isolation	<10
NM-7B	Pressurizer Sample Header Outside Containment Isolation	<10
NM-22A	NC Hot Leg A Sample Line Inside Containment Isolation	<10
NM-25A	NC Hot Leg C Sample Line Inside Containment Isolation	<10
NM-26B	NC Hot Leg Sample Hdr Outside Containment Isolation	<10
NM-72B	NI Accumulator 1A Sample Line Inside Containment Isolation	<10
NM-75B	NI Accumulator 1B Sample Line Inside Containment Isolation	<10
NM-78B	NI Accumulator 1C Sample Line Inside Containment Isolation	<10
NM-81B	NI Accumulator 1D Sample Line Inside Containment Isolation	<10
NM-82A	NI Accumulator Sample Hdr Outside Containment Isolation	<10
NM-187A#	SG 1A Upper Shell Sample Containment Isolation Inside	<10
NM-190A#	SG 1A Blowdown Line Sample Containment Isolation Inside	<10
NM-191B#	SG 1A Sample Hdr Containment Isolation Outside	<10
NM-197B#	SG 1B Upper Shell Sample Containment Isolation Inside	<10
NM-200B#	SG 1B Blowdown Line Sample Containment Isolation Inside	<10
NM-201A#	SG 1B Sample Hdr Containment Isolation Outside	<10
NM-207A#	SG 1C Upper Shell Sample Containment Isolation Inside	<10
NM-210A#	SG 1C Blowdown Line Sample Containment Isolation Inside	<10
NM-211B#	SG 1C Sample Hdr Containment Isolation Outside	<10
NM-217B#	SG 1D Upper Shell Sample Containment Isolation Inside	<10
NM-220B#	SG 1D Blowdown Line Sample Containment Isolation Inside	<10
NM-221A#	SG 1D Sample Hdr Containment Isolation Outside	<10
NV-15B	Letdown Containment Isolation Outside	<10
NV-89A	NC Pumps Seal Return Containment Isolation Inside	<10
NV-91B	NC Pumps Seal Return Containment Isolation Outside	<10
NV-314B#	Charging Line Containment Isolation Outside	<10

Note 1

CATAMBA - UNITS 1 & 2

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Amendment No. 32 (Unit 1)  
Amendment No. 25 (Unit 2)

Note 1: Upon capping of penetrations associated with deletion of UHI, these specifications are no longer applicable.

TABLE 3.6-2a (Continued)

UNIT 1 CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (s)</u>
3. Manual (Continued)		
SM-103#	Main Steam IC	N.A.
SM-119#	Main Steam IC	N.A.
SM-141#	Main Steam IC	N.A.
SA-4#	Main Steam IC	N.A.
SM-19#	Main Steam ID	N.A.
SM-70#*	Main Steam ID	N.A.
SM-102#	Main Steam ID	N.A.
SM-118#	Main Steam ID	N.A.
SM-140#	Main Steam ID	N.A.
WE-20*	Cont Bldg Supply Isol	N.A.
WE-22*	Cont Bldg Supply Isol	N.A.
WE-56*	Cont Bldg Supply Isol	N.A.
FW-4*	Refueling Water	N.A.
NV-862#*	Pressurizer Auxiliary Spray ND Outside Containment	N.A.
WLA-21#*	Steam Generator Drain Pump Discharge Outside Containment Isolation	N.A.
WLA-24#*	Steam Generator Drain Pump Discharge Outside Containment Isolation	N.A.

TABLE NOTATIONS

\* May be opened on ... intermittent basis under administrative control.

\*\* Valve also receives a High Radiation (H) and/or a High Relative Humidity isolation signal.

# No. subject to Type C leakage tests.

NOTE: Times are for valve operation only, and do not include any sensor response or circuit delay times.  
See Specification 3/4 3.2 for system actuation response times.

\*\*\* Not applicable for Unit 1 until after the third refueling outage,

TABLE 3.6-2b (Continued)

UNIT 2 CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (s)</u>
1. Phase "A" Isolation (Continued)		
KC-305B#	Excess Letdown Hx Supply Containment Isolation (Outside)	<20
KC-315B#	Excess Letdown Hx Return Header Containment Isolation (Outside)	<20
KC-320A#	NCDT Hx Supply Hdr Containment Isolation (Outside)	<20
KC-332B#	NCDT Hx Return Hdr Containment Isolation (Inside)	<20
KC-333A#	NCDT Hx Return Hdr Containment Isolation (Outside)	<20
KC-429B	RB Drain Header Inside Containment Isolation	<10
KC-430A	RB Drain Header Outside Containment Isolation	<10
NB-260B	Reactor Makeup Water Tank to Flush Header	<10
NC-53B	Nitrogen to Pressurizer Relief Tank #1 Containment Isolation Outside	<10
NC-54A	Nitrogen to Pressurizer Relief Tank #1 Containment Isolation Inside	<10
NC-56B	RMW Pump Disch Cont Isolation	<10
NC-195B	NC Pump Motor Oil Containment Isolation Outside	<10
NC-196A	NC Pump Motor Oil Containment Isolation Inside	<10
NF-228A	Unit 2 Air Handling Units Glycol Supply Containment Isolation Outside	<10
NF-233B	Unit 2 Air Handling Units Glycol Return Containment Isolation Inside	<10
NF-234A	Unit 2 Air Handling Units Glycol Return Containment Isolation Outside	<10
NI-47A	Accumulator N <sub>2</sub> Supply Outside Containment Isolation	<10
NI-95A	Test Hdr Inside Containment Isolation	<10
NI-96B	Test Hdr Outside Containment Isolation	<10
NI-120B	Safety Injection Pump to Accumulator Fill Line Isolation	<10
NI-122B#	Hot Leg Injection Check 2NI124, 2NI128 Test Isolation	<10
NI-154B#	Hot Leg Recirculation Check 2NI125, 2NI129 Test Isolation	<10
<del>NI-255B</del>	<del>UHI Check Valve Test Line Isolation</del>	<del>&lt;10</del>
<del>NI-258A</del>	<del>UHI Check Valve Test Line Isolation</del>	<del>&lt;10</del>
<del>NI-264B</del>	<del>UHI Check Valve Test Line Outside Containment Isolation</del>	<del>&lt;10</del>

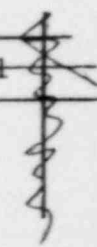
Note 1

~~Note 1: Upon capping of penetrations associated with deletion of UHI, these specifications are no longer applicable.~~

CATWBA - UNITS 1 & 2

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Amendment No. 2 (Unit 1)  
Amendment No. 2 (Unit 2)



NM-438A\*\*\* Liquid Sample Panel Return Line Outside Containment Isolation ≤10

TABLE 3.6-2b (Continued)

UNIT 2 CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (s)
1. Phase "A" Isolation (Continued)		
<del>NI-266A</del>	<del>UHI Check Valve Test Line Inside Containment Isolation</del>	<del>&lt;10</del>
<del>NI-267A</del>	<del>UHI Check Valve Test Line Inside Containment Isolation</del>	<del>&lt;10</del>
NI-153A#	Hot Leg Injection Check NI156, NI159 Test Isolation	<10
NM-3A	Pressurizer Liquid Sample Line Inside Containment Isolation	<10
NM-6A	Pressurizer Steam Sample Line Inside Containment Isolation	<10
NM-7B	Pressurizer Sample Header Outside Containment Isolation	<10
NM-22A	NC Hot Leg A Sample Line Inside Containment Isolation	<10
NM-25A	NC Hot Leg C Sample Line Inside Containment Isolation	<10
NM-26B	NC Hot Leg Sample Hdr Outside Containment Isolation	<10
NM-72B	NI Accumulator 2A Sample Line Inside Containment Isolation	<10
NM-75B	NI Accumulator 2B Sample Line Inside Containment Isolation	<10
NM-78B	NI Accumulator 2C Sample Line Inside Containment Isolation	<10
NM-81B	NI Accumulator 2D Sample Line Inside Containment Isolation	<10
NM-82A	NI Accumulator Sample Hdr Outside Containment Isolation	<10
NM-187A#	SG 2A Upper Shell Sample Containment Isolation Inside	<10
NM-190A#	SG 2A Blowdown Line Sample Containment Isolation Inside	<10
NM-191B#	SG 2A Sample Hdr Containment Isolation Outside	<10
NM-197B#	SG 2B Upper Shell Sample Containment Isolation Inside	<10
NM-200B#	SG 2B Blowdown Line Sample Containment Isolation Inside	<10
NM-201A#	SG 2B Sample Hdr Containment Isolation Outside	<10
NM-207A#	SG 2C Upper Shell Sample Containment Isolation Inside	<10
NM-210A#	SG 2C Blowdown Line Sample Containment Isolation Inside	<10
NM-211B#	SG 2C Sample Hdr Containment Isolation Outside	<10
NM-217B#	SG 2D Upper Shell Sample Containment Isolation Inside	<10
NM-220B#	SG 2D Blowdown Line Sample Containment Isolation Inside	<10
NM-221A#	SG 2D Sample Hdr Containment Isolation Outside	<10
NV-15B	Letdown Containment Isolation Outside	<10
NV-89A	NC Pumps Seal Return Containment Isolation Inside	<10
NV-91B	NC Pumps Seal Return Containment Isolation Outside	<10
NV-314B#	Charging Line Containment Isolation Outside	<10

Note 1

~~Note 1: Upon capping of penetrations associated with deletion of UHI, these specifications are no longer applicable.~~

CATAWBA - UNITS 1 & 2

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Amendment No. 2 (Unit 1)  
Amendment No. 2 (Unit 2)

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TABLE 3.6-2b (Continued)

UNIT 2 CONTAINMENT ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (s)</u>
3. Manual (Continued)		
SM-103#	Main Steam 2C	N.A.
SM-119#	Main Steam 2C	N.A.
SM-141#	Main Steam 2C	N.A.
SA-4#	Main Steam 2C	N.A.
SM-19#	Main Steam 2D	N.A.
SM-70#*	Main Steam 2D	N.A.
SM-102#	Main Steam 2D	N.A.
SM-118#	Main Steam 2D	N.A.
SM-140#	Main Steam 2D	N.A.
WE-20*	Cont Bldg Supply Isol	N.A.
WE-22*	Cont Bldg Supply Isol	N.A.
WE-56*	Cont Bldg Supply Isol	N.A.
FW-A*	Refueling Water	N.A.
NV-862#*	Pressurizer Auxiliary Spray ND Outside Containment	N.A.
WLA-21#*	Steam Generator Drain Pump Discharge Outside Containment Isolation	N.A.
WLA-24#*	Steam Generator Drain Pump Discharge Outside Containment Isolation	N.A.

TABLE NOTATIONS

\* May be opened on an intermittent basis under administrative control.

\*\* Valve also receives a High Radiation (H) and/or a High Relative Humidity isolation signal.

# Not subject to Type C leakage tests.

NOTE: Times are for valve operation only, and do not include any sensor response or circuit delay times.  
See Specification 3/4 3.2 for system actuation response times.

\*\*\* Not applicable for Unit 2 until after the second refueling outage.

Attachment 2

Discussion and No Significant Hazards Analysis



## DISCUSSION AND NO SIGNIFICANT HAZARDS ANALYSIS

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The proposed amendment would:

- (1) Add penetration M-375 to Table 3.6-1;
- (2) Add valve NM-438B to Tables 3.6-2a and 3.6-2b; and
- (3) Delete information which is no longer applicable.

The additions to the Tables will be required due to the scheduled implementation of a station modification which will reroute a Post Accident Liquid Sample (PALS) drain line in each unit.

The PALS equipment is a part of the Nuclear Sampling (NM) System at Catawba which has been designed in accordance with the recommendations contained in NUREG-0737, item II.B.3. The modification to the NM System will involve removing the discharge line from the PALS panel which is currently routed to the Waste Evaporator Feed Tank Sump. A new line consisting of 0.5" stainless steel piping will route discharge from the PALS panel to the Containment Floor and Equipment sump. A new Containment penetration (M-375) will be required since the new line will go through the Nuclear Sample Lab wall, Reactor Building and Containment wall. Class B Containment isolation valves (NM-438B) will be installed to maintain Containment integrity. Rerouting of the drain line will ensure that any residual samples collected from the PALS panel will be returned to the Containment. This is consistent with the guidance contained in NUREG-0737.

This modification is scheduled to be implemented during the next refueling outages for each Unit.

The third refueling outage for Unit 1 is currently scheduled to begin on December 14, 1988 and finished on February 8, 1989. The Unit 2 second refueling outage is currently scheduled to begin on February 9, 1989 and end on April 10, 1989. The proposed wording for the Technical Specification changes have been conditioned such that the changes may be issued prior to these outages but not be applicable until after the modifications have been installed.

The proposed Technical Specification amendment would also delete some wording from each of the affected Tables which is no longer applicable. As such, this portion of the amendment request is strictly administrative.

10 CFR 50.92 states that a proposed amendment involves no significant hazards considerations if operation in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The amendment would add a penetration and several valves to Tables contained within the Specification. The additions are the result of the rerouting of the PALS drain line back into Containment. The rerouting is to be done in accordance with the guidance

DISCUSSION AND NO SIGNIFICANT HAZARDS ANALYSIS (Continued)

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contained in NUREG-0737, item II.B.3. to reduce radiation exposure from reactor coolant samples. The amendment would also make several administrative changes to the Tables. This amendment will therefore not effect the probability of any accidents and will reduce the consequences in terms of reduction in personnel dose.

The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated. The modification involves a change to the post-accident liquid sampling panel. The administrative changes will have no effect on the operation of the station. Therefore, no new modes of reactor operation are introduced and the design of the Reactor Coolant System and its primary support systems are not affected.

The proposed changes will not result in a significant reduction in a margin of safety. The rerouting of this drain line will not introduce any new possible failure modes. There is no potential leakage outside containment because of the installation of the qualified containment isolation valves and the design of the penetration. Overall, the potential for radiation exposure will be reduced. The administrative changes will not effect any margin of safety.

Based on the above discussion, Duke Power concludes that this proposed amendment does not involve Significant Hazards Considerations.