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March 6, 1985
83090.024

Mr. V. Noonan
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20814

Subject: Response to NRC Questions - Spent Fuel Cooling Pump Grounding
Comanche Peak Steam Electric Station
Independent Assessment Program - Phases 1 and 2
Texas Utilities Generating Company
Job No. 83090

Reference: Cygna Final Report, Phases 1 and 2
TR-83090-01, Revision 0
Observation WD-07-01

Dear Mr. Noonan:

Attachment 1 documents a discussion with Mr. Om Chopra of your staff in which Cygna was requested to determine whether TUGCO had performed any corrective action as a result of Phase 1 Observation WD-07-01. This observation concerns the walkdown in which it was noted that the spent fuel pool cooling pump was single grounded where design drawings call for two ground connections. Cygna originally closed this issue based on the fact that double grounding is required for personnel safety only and not for the purpose of satisfying any safety related system function or design requirement.

A subsequent discussion with Mr. Ivan Vogelsang of TUGCO (see Attachment 2) has revealed that the pump is double grounded by an acceptable alternate means different than the configuration shown on the design drawing. This was not documented by TUGCO since the double grounding of the pump is not a safety related requirement and as such is not subject to the Class 1E quality assurance requirements applicable to the pump.

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If you have any further questions or wish to discuss this response, please call at your convenience.

Very truly yours,

N.H. Williams

N.H. Williams
Project Manager

NHW/ajb

Enclosures

cc: Mr. G. Bagchi
Mr. J. George
Mr. D. Wade
Mr. D. Pigott
Mr. S. Treby
Ms. J. Ellis
Mr. S. Burwell



Communications Report

Company:	Texas Utilities	<input checked="" type="checkbox"/> Telecon	<input type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 1	Job No.	83090
		Date:	2/4/85
Subject:	Observation WD-07-01 Single Grounded Pump	Time:	11:20 a.m.
		Place:	SFRO
Participants:	O. Chopra	of	USNRC
	N. Williams		Cygna

Item	Comments	Required Action By
	<p>Mr. Chopra called to find out if TUGCO had brought the single grounded pump into compliance with the drawing. He understood that the double grounding requirement was for personnel safety but he was concerned that a design requirement was not implemented. N. Williams explained that Cygna did not pursue the matter further since it was not a safety related requirement and as such the same quality assurance measures do not apply. Cygna will, however, check with TUGCO to establish whether they installed the second ground and call G. Bagchi (301/492-8251) back with the response.</p>	

Signed: N. Williams Page 1 of 1
 Distribution: N. Williams, D. Wade, J. van Amerongen, R. Hess, L. Weingart, S. Treby, J. Ellis,
 S. Burwell, I. Martin, K. Zee, Project File



Communications Report

Company:	Texas Utilities	<input checked="" type="checkbox"/> Telecon	<input type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 1	Job No.	83090
		Date:	2/26/85
Subject:	Observation WD-07-01 Single Grounded Pump	Time:	1:00 p.m.
		Place:	SFRO
Participants:	I. Vogelsang, J. van Amerongen	of	TUGCO
	K. Zee, L. Weingart		Cygna

Item	Comments	Required Action By
I.	<p>I. Vogelsang described the "as-built" grounding of the Spent Fuel Cooling Pump Motor:</p> <ul style="list-style-type: none"> A. A 1" rigid steel conduit is installed between the motor space heater terminal box and the cable tray - no "flex" used. B. Another rigid steel conduit is installed for the motor power circuit. Approximately 3' of liquidtight "flex" is used at the connection to the motor terminal box. Approximate total raceway length is 22'. C. One #4/0 ground cable is installed between the "ground loop" and the motor's ground pad - cable is routed in parallel to the 1" conduit. D. One #4/0 bonding jumper is connected in parallel to the liquidtight "flex" using approved fittings. 	
II.	<p>Regarding conformance of the as-built configuration to the grounding details shown on G&H drawing E1-1703-01, Revision 6; I. Vogelsang indicated that the "as-built" condition provided the required two connections as per Table 1 of the referenced details.</p> <p>K. Zee agreed that although the installation did not match the grounding details, it did "effectively" provide the two-point connection required by the grounding details.</p>	

Signed: W. Williams Page 1 of 2 /ajb

Distribution: N. Williams, D. Wade, J. van Amerongen, R. Hess, T. Martin, K. Zee, L. Weingart, S. Treby, J. Ellis, S. Burwell, Project File

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Item	Comments	Required Action By
	<p>1. The first connection is provided by Item 3 of the "as-built" condition.</p> <p>2. The second condition is "effectively" provided by a combination of Items 2 and 4 of the "as-built" condition and Details 3 and 4 of G&H drawing E1-1703, Revision 6.</p> <p><u>Discussion</u></p> <p>The bonding jumper and the physical connection of the power terminal box to the motor frame "effectively" bonds the rigid steel power conduit to the motor frame. The rigid steel conduit is acceptable as a ground conductor thus grounding the motor frame to the tray system. Detail 3 of G&H drawing E1-1703, Revision 6, shows the tray system grounded via #4/0 cable. This in combination with Item 3 of the "as-built" condition provides the required two connections of the "ground loop" to the motor.</p> <p>III. According to I. Vogelsang, this discrepancy with the drawing was not documented due to the fact that double grounding the pump in question is a non-safety related (i.e., non-1E) requirement.</p>	