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September 26, 1984

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Byron Generating Station Units 1 and 2
Cable Pan Hanger Inspections
NRC Docket Nos. 50-454 and 50-455

Dear Mr. Keppler:

This is to provide the results of the cable pan hanger weld reinspection program which was described in testimony before the Byron ASLB in August, 1984. Our plans for additional weld reinspections are also described.

The reinspection of cable tray hangers furnished by Systems Control Corporation was completed to ensure that no connections had missing portions of weld. All type DV-8 connections and all other accessible connections were inspected. A total of 30,217 connections were inspected for weld presence. Of this total, 12,241 were DV-8s. Thirty-nine DV-8s and forty-four other connections were reported to have missing portions of welds. The worst case was a DV-8 detail where the horizontal unistrut was tack welded to the end channel at four corner locations. Even though a substanstial portion of weld was missing, that hanger is still capable of transferring the design loads. In no case did a missing portion of weld have design significance.

The attached Table I shows the results of the reinspection program. When the program was expanded the first time from approximately 300 connections to well over 3000 connections, the 3000+ connections were selected on the basis of identifying those connections that would not be satisfactory with R values of less than 47%. The R value is the actual hanger capacity divided by the design capacity of the hanger. The inspection program was subsequently expanded to include all DV-8 connections and all other accessible connections. As shown in Table I, all DV-8 connections have been reinspected. One DV-1, two DV-3, one DV-7, and four DV-162 connections have R values less than 0.47. The results of the inspections of the remaining types of connection details indicate that none of these had R values less than 0.47. Therefore, reinspection of these remaining inaccessible connections will not be performed. The inaccessible DV-1, DV-3, DV-7, and DV-162 connections will be made accessible and will be reinspected. This effort involves 339 DV-1, 158 DV-3, 1 DV-7, and 52 DV-162 connections.

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Since there have been over 30,000 inspections and only 83 of these had missing portions of welds, none of which were design significant, there is no reason to suspect that anything of significance will be found during these additional 550 inspections. Therefore, the completion of these inspections prior to fuel load is not necessary.

We expect that these additional inspections will take three to six weeks. They will be completed prior to exceeding 5% power. Please advise us if this plan is unsatisfactory.

Very truly yours,

L. O. DelGeorge

L. O. DelGeorge
Assistant Vice President

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TABLE I

SYSTEMS CONTROL SHOP WELDS

DETAIL NO.	DV-1	DV-2	DV-3	DV-4	DV-5	DV-7	DV-8	-	DV-22	DV-24	DV-31	DV-32	DV-57	DV-58	DV-120	DV-138	DV-162	OTHER* DETAILS	TOTAL W/O DV-8	GRAND TOTAL
TOTAL INSPECTED	2367	2617	1482	693	543	406	12,241	-	1209	356	124	55	48	144	784	632	3525	2991	17,976	30,217
MISSING WELDS	4	0	2	0	0	1	39	-	2	0	0	0	0	2	2	4	6	21	44	83
NO. OF CONN. WHERE MISSING WELDS WERE REPLACED BY TACK WELDS	2	0	0	0	0	1	9	-	0	0	0	0	0	0	1	0	0	0	4	13
CONN. WHERE HORIZ. SHOP WELD WAS DELETED PER FCR/NCR	59	71	0	55	22	0	0	-	0	0	0	0	0	0	0	0	0	0	207	207
R < 0.5	1	0	2	0	0	1	23	-	0	0	0	0	0	0	0	0	4	0	8	31
LOWEST R VALUES	0.38	0.75	0.157 0.42	0.75	0.75	0.45	0.075 0.17 0.21 0.22 0.23 0.23	0.29 0.30 0.30 0.31 0.31 0.35	1.0 1.0	1.0 1.0	0.75	0.75	0.75	0.63 0.64	0.75	0.64 0.66 0.74 0.74	0.16 0.16 0.17 0.17	0.68 0.68 0.76 0.82 1.0 1.0		
NO. INACCESSIBLE	339	157	158	153	65	1	0	-	14	15	1	0	3	14	307	5	52	82	1,366	1,366

*Other details include 66 detail types which are infrequently used.