TOLEDO EDISON

RICHARD P. CROUSE
Vice President
Nuclear
(419) 259-5221

Docket No. 50-346

License No. NPF-3

Serial No. 736

August 31, 1981

Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz, Chief
Operating Peactor Branch No. 4
Division of Operating Reactors
United State Nuclear Regulatory Commission
Washington C. 20555

Dear Mr. Stolz:

This letter is in regard to the proposed technical specification change request for the installation of undervoltage relay bypass pushbuttons at the Davis-Besse Nuclear Power Station Unit 1. The original request was submitted as Attachment III to Toledo Edison, letter dated March 23, 1979 (Serial No. 487).

These pushbuttons are to be used during reactor coolant pump or circulating water pump starting The accelerating times of these motors exceed the time delay of the undervoltage relays. The resulting voltage dip during motor starting would erroneously indicate a condition of a degraded power source. This would start the emergency diesel generators and transfer the essential power system to this emergency source. The bypass pushbuttons will preclude the unnecessary electric power source shift for these large motor starts.

This letter is to clarify several aspects of this modification.

Item 1 - Circuit Quality

This represents a modification to a safety related circuit and therefore is consistent with the standards of the original design including IEEE 279-1971. This is reflected in the designation of "Q" on the attached Drawing Change Notice (page 1 of 2, DCN E-34B-10).

Item 2 - Pushbutton Effects on Circuitry

The Drawing Change Notice (DCN) attached reflects the modified undervoltage sensing scheme for degraded electrical power sources. This does not affect the loss power sensing function in any way (relays performing this function are set at 59%).

A015
S1/1

The 90% undervoltage relay contacts (27A1, 2, 3 and 4) are normally open. Upon sensing a degraded voltage condition, anxiliary relay contacts 27A1, 2, 3 and 4 are closed, thus energizing relay coils 27X-4 and 5. In turn this will lead to starting of the emergency diesel generators and transfer the essential buses to these diesel generators.

As indicated by the DCN, the pushbuttons when depressed simply prevent circuit completion such that relay coils 27X-4 and 5 would see no change of condition during the voltage dip associated with pump starting. When the pushbuttons are released, the circuit is mechanically restored to its original condition. The pushbuttons themselves do not activate or deactivate any circuitry.

Item 3 - Pushbutton Type

The pushbuttons are:

Cutler Hammer type E30, operator catalog No. E30AA for momentary operation and contact block type KLA3.

It is expected that this information is enough to clarify the intended use and function of this modification to authorize the proposed technical specification as requested.

Very truly yours,

J. H. Goldberg for R. P. Crouse

RPC/TKR

jh a/1-2

cc:
NRC Resident Inspector

BECHTEL
GAITHERSBURG, MD.

DRAWING CHANGE NOTICE Q

JOB NO.	DRAWING NO.	REV. NO.
7749	E-34B SH 14A	1

DCN NUMBER	PAGE	OF
E-34B-10	1	2

CHANGE REQUESTED BY: Client ■ Engineering ☐ Field ☐ Supplier/Contractor ☐

REASON FOR CHANGE:
Incorporate FCR 78-280

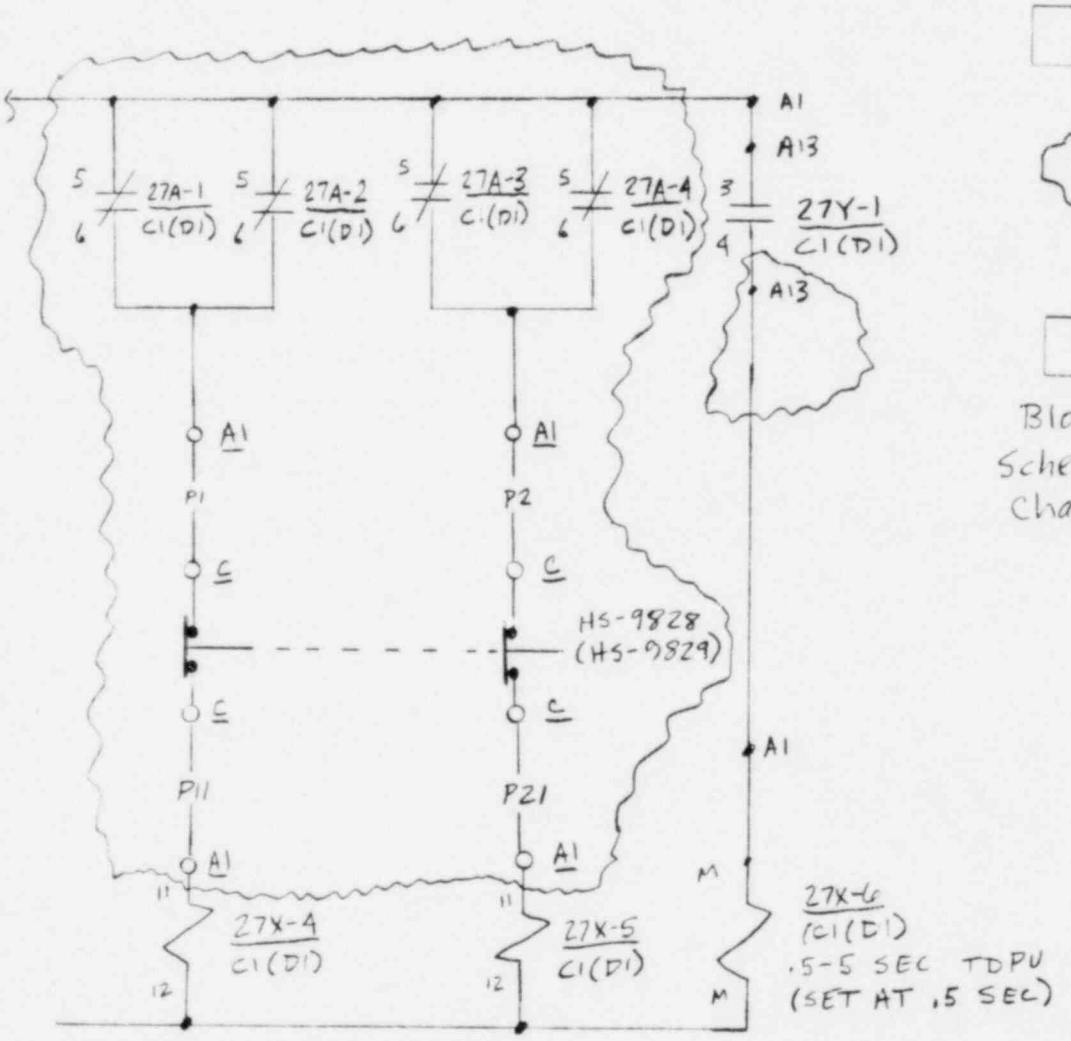
OTHER DOCUMENTS (Including PURCHASE ORDERS) AFFECTED BY THIS CHANGE:
See FCR 78-280 CHECKLIST

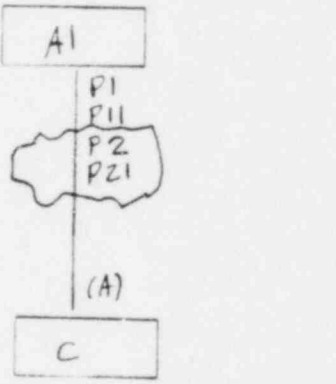
PM, MR OR OTHER DOCUMENTS PREPARED FOR DCN CHANGE? YES ☐ NO ■

MATERIAL PROCUREMENT RESPONSIBILITY: BECHTEL ☐ BECHTEL FIELD ☐ CLIENT ■ SUPPLIER/CONTRACTOR ☐ NONE REQUIRED ☐

DISPOSITION OF AFFECTED MATERIAL: Rework ☐ Scrap ☐ Use AS IS ☐ As Noted ■

DESCRIPTION OF CHANGE:





Block Diagram
Scheme AC103 (AD103)
Channel 1 (2)

NOTE: WORK ACCORDING TO THIS DCN SHOULD BE DONE AFTER DCN E34B-3 IN FCR 77-430

REVIEWED WITHOUT COMMENT	ARCHITECTURAL	CIVIL	CONTROL SYSTEMS	ELECTRICAL	PLANT DESIGN	MECHANICAL
	N/A	NA	NA	[illegible]	NA	NA

ORIGINATOR	CHECKED BY	GROUP SUPERVISOR	PROJECT ENGINEER	DATE
[illegible]	[illegible]	M. E. Bacinoglu	M. Malcom	9-6-79

GPD-27170 3/77

GPD-27170 3/77