

50-346 A

April 17, 1974

John B. Farmakides, Esq., Chairman
Atomic Safety and Licensing Board
U. S. Atomic Energy Commission

Dr. George R. Hall
Atomic Safety and Licensing Board
U. S. Atomic Energy Commission
Washington, D. C. 20545

John H. Brebbia, Esq.
Atomic Safety and Licensing Board
Alston, Miller & Gaines
1776 K Street, N. W.
Washington, D. C. 20006

In the Matter of: The Toledo Edison Co. and
The Cleveland Electric Illuminating Co., (Davis-
Besse Nuclear Power Station), Dkt. No. 50-346A;
The Cleveland Electric Illuminating Co., et al.
(Perry Nuclear Power Plant, Units 1 and 2), Dkt.
Nos. 50-440A & 50-441A; Duquesne Light Co., et al.
(Deaver Valley Power Station, Unit No. 2), Dkt.
No. 50-412A.

Gentlemen:

Enclosed please find five items of correspondence that were filed with the Department of Justice and subsequently made available to the A.E.C. Regulatory Staff. After careful consideration, the Staff and the Justice Department felt that these letters should be made available to the Atomic Safety and Licensing Board and all the parties in the above captioned proceeding. It is further the position of the Regulatory Staff and the Justice Department that these letters may be of assistance to the parties and the Board in making determinations regarding the direction that this proceeding will follow. It is the position of the Department and the Staff that the letters speak for themselves and that no argumentation in the form of a pleading is necessary at this time.

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A. Braitman, L:OAI (2)

ASLB

J. Rutberg (2)

B. Vogler

R. Verdisco

A. Popper

ENCLOSURES:

As stated above

BURNADETT All parties

DATE

Respectfully submitted,

Andrew F. Popper

Counsel for AEC Regulatory Staff

OGC Formal Files

OGC Files (2)

Solicitor, GC

HKShapar

Steven Charne

Counsel for the U.S. Department OGC

of Justice

Antitrust Division

OGC

BVogler

4/1/74

Heary
AP-152

JJSaunders:jf

O 6 1972

TERMS
60-416-31Appleton Municipal Utilities
Corporate Building
Appleton, Wis. 54911

1. We desire to have you apply
to the State Corporation Commission
of Pennsylvania for a license to supply
electric power to the City of Appleton and
to the People of Appleton
and surrounding vicinity, etc.

Dear Sirs:

We have been informed that the proposed electric
utilities intent to apply shortly for a license to supply
the City of Appleton and the People of Appleton
utilizing in the opinion of this letter,

application to be filed at 12:01 A.M. October 14, 1972, to
allow them to supply power to power the Appleton
area. This letter is to advise you to take certain
steps to prevent such usage or minimize a situation incor-
porating with the subsequent letter.

1. First of all, if you do file application, you will be
able to file to other areas you are entitled to, and you would be
able to file a license application utilizing either the
U.S. Public Utilities Commission or your state commission.
In this application, we have made a location in the
Pennsylvania, we would appreciate information on what you can do
with our points.

1. Are you interested in making arrangements for
cooperation with one of the applicants, including, but not limited to
participation in the active part of this, or coordination
of the issuance of power, which would involve a merger
of applicants' existing lines, or would we arrange said
participation or coordination with one applicant? If so, there
were two applicants' right prior to your application and you
are your first for coordination? Please furnish all details.

2. And your second have full power over coordination
and the alternative source areas, you will be able to coordinate
with the applicants, for lines to be in terms of cost of power
and power supply reliability?

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3. Do the applicants control all or part of the high volume transmission to your area? Is their ownership or control of transmission a limiting factor in your obtaining additional power from electric utility sources or in coordinating planned expansion of your own generating capacity with other electric utilities? If so, please explain.

4. Give you any other facts which you believe would have a bearing on the competitive effects of a grant of the license to the applicants which we should consider before rendering our advice?

We would appreciate your prompt attention to this matter. In reply, please use the above address and Department of Justice file number.

Sincerely yours,

THOMAS M. COOPER
Assistant Attorney General
Antitrust Division

By: Joseph J. Gavins
Chief, Telecommunications
Section

POOR
ORIGINAL

Identical letters were sent to the following:

Seaca City Board
Public Affairs
Seaca City, Ohio 44664

Seaman's Municipal Light Department
South Union Avenue
Brewster, Ohio 44613

Cuyahoga Falls Electric System
2500 Bailey Road
Cuyahoga Falls, Ohio 44221

Delaware Rural Electric Cooperative, Inc.
25 North Union Street
Delaware, Ohio 43015

Hart Publishing Municipal Electric Department
79 Main Street
Hart Publishing, Ohio 44613

Lilienthal City Municipal Electric Department
215 Main Street
Lilienthal, Pennsylvania 16117

Miranda Electric Cooperative, Inc.
Proctor Street
New Lincoln, Ohio 44651

Orion Municipal Utility Service
Orion, Ohio 44661

Young City Municipal Electric Department
315 Park Avenue
Young City, Pennsylvania 16117

Yardville Municipal Electric Cooperative
Post Office Box 101
Yardville, Ohio 44671

Zirndorf Municipal Light Department
Box 101
Zirndorf, Ohio 44664

Belmont-Madison Electric Cooperative, Inc.
Post Office Box 112
Allisonville, Ohio 44604

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Waldorf Municipal Light & Power System
33 West Liberty Street
Waldorf, Ohio 44415

Madison Electric Department
27 East Main Street
Madison, Ohio 44256

Lodi Power & Light Department
100 Kingsworth Avenue
Lodi, Ohio 44254

Benton-Tiffin Rural Electric Co-op., Inc.
Post Office Box 100
Wellington, Ohio 44690

Lucas County of Public Affairs
Lucas, Ohio 43130

Monroe Rural Electric Cooperative, Inc.
120 South Monroe Street
Monroe, Ohio 43050

Kardaierville Municipal Utilities
Kardaierville, Ohio 44643

Monroeville Electric Department
Monroe Street
Monroeville, Ohio 44147

Torrey Electric Cooperative, Inc.
75 South Torrey Street
St. Odile, Ohio 40331

Benton-Hall Municipal Light Plant
40 North Canal Street
Benton-Hall, Ohio 44614

Slim Municipal Electric Department
34 West Main Street
Slim, Ohio 44654

Logan Municipal Electric Department
471 Woodlawn Avenue
Logan, Ohio 43138

Minerva Municipal Light & Power
200 Main Street P.O. Box 24
Minerva, Ohio 44657

Crawfordsville Municipal Utilities
1110 Berry Avenue
Crawfordsville, Ohio 44637

**POOR
ORIGINAL**

Prospect Municipal Electric Light Plant
130 North Main
Prospect, Ohio 43342

Seville Municipal Light & Power System
40 West Main Street
Seville, Ohio 44273

South Vienna Light Department
South Vienna, Ohio 45360

Wadsworth Municipal Light & Water Department
Wadsworth, Ohio 44281

Wellington Board of Public Affairs
55 Main Street
Wellington, Ohio 44090

Wilmore Municipal Electric Department
Wilmore, Ky., Pennsylvania 17187

Municipal Electric System
City Hall
Lafayette, Ohio 44831

Columbus Board of Public Affairs
Columbus, Ohio 43260

Municipal Electric System
City Hall
Galion, Ohio 44830

Urban Board of Public Affairs
Cincinnati, Ohio 45246

Municipal Electric System
City Hall
New Kensington, Pennsylvania 15132

Watson-Lewisville Electric Light Department
Lewisville, Pennsylvania 15137

Pittsburgh Municipal Light Department
320 Grant Avenue
Pittsburgh, Pennsylvania 15218

Cleveland Division of Light & Power
1125 Euclid Avenue
Cleveland, Ohio 44114

Painesville Municipal Light & Power
17 Jackson Street
Painesville, Ohio 44077

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Bowling Green Electric Department
515 West Water Street
Bowling Green, Ohio 43402

Brunswick Municipal Electric Light
5 Water Street
Box 516
Brunswick, Ohio 43716

Bryan Municipal Light & Water Utilities
341 East Washington Street
(General Office)
Bryan, Ohio 43205

Custer Board of Public Affairs
101 S. Spring Street
Custer, Ohio 45821

Dover Municipal Electric Department
Dover, Ohio 43317

Elyria Municipal Light & Water Department
1st Clinton Street
Elyria, Ohio 44035

Fenton Municipal Light Plant
302 Washington Street
Fenton, Ohio 45237

Hankins Municipal Light & Power
Hankins, Ohio 43335

Liberty Center Board of Light Plant
514 West Monroe
Liberty Center, Ohio 45332

Lima Municipal Utilities
Post Office Box 116, 10th Street &
Central Avenue, Lima 45802

Oak Harbor Board of Public Affairs
400 West Main Street
Oak Harbor, Ohio 43449

Perrysburg Board of Public Affairs
Perrysburg, Ohio 43542

Ridgefield Board of Light & Power
Ridgefield, Ohio 45370

Rockville Board of Public Affairs
Rockville, Ohio 43456

POOR
ORIGINAL

SMCharpentier

October 10, 1972

TMK:JJS
60-413-61

ATTACHMENT

Philip E. Ardery, Esq.
Brown, Gandy, Johnson
1000 Euclid Avenue
Louisville, Kentucky 40202

Re: Commonwealth Company
Ohio Edison Company
Panhandle Gas Company
Cincinnati Gas Lighting Company and
Tulane Gas Company -
Electric Light & Power, Inc. File #2

Dear Mr. Ardery:

On September 6, 1972, the Department of Justice sent a letter of inquiry to various electric utility companies concerning their relationship with municipalities. In response, we have received replies from sixteen of these municipalities indicating that "a detailed response to this inquiry will be made by American Electric Power Co., Inc...." We do not understand why you have been mentioned as official counsel to AEP, Inc.

The substantive information of this letter is enclosed for your review. It is our hope that your reply will be submitted prior to November 10, 1972, so that your response to this inquiry will be timely. We would appreciate your comments regarding the inquiry sent originally by D.C. It is anticipated that your comments will be necessary prior to the final compilation of this letter addressed to the four remaining electric utility companies in question. Your comments concerning the information which you can furnish concerning the activities of AEP, Inc., in its relationship to the municipalities would be appreciated.

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Thank you in advance for your cooperation.

Sincerely yours,

STEVEN M. CHENG
Associate Attorney General
Antitrust Division

cc: Steven M. Cheng
Attorney, Department of Justice

POOR
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ATTACHMENT D

SUCharno:js

November 3, 1972

TEK-SIB
CO-410-61

REMARKS

Philip P. Anthony, Esq.,
1700 Pennsylvania Avenue
1700 Pennsylvania Avenue
Washington, D.C. 20006
Telephone, (202) 462-2022

To: Enclosed find Company
Ohio Edison Company,
Con Edison Nuclear Company,
Cleveland Electric Power Company and
Delaware River Company.
Enclosed is a copy of Exhibit 10410, 2.

Dear Mr. Anthony:

On October 12, 1972, the Department wrote you concerning the successful nuclear acquisition and operation which your firm has made of the 1000 megawatt reactor at Millstone, Conn., on behalf of Connecticut General Electric which is a member of Connecticut Industrial Resources, Inc. Since we have not received your letter yet, I enclose our original letter to you which was sent on October 12, 1972, to your attention. Please find attached hereto a copy of our letter to you dated October 12, 1972, which letter will be in possession of your company sometime by November 20.

If your firm is not representing HECO, Inc., with reference to this matter, we would appreciate your advising us immediately.

Sincerely yours,

EDWARD R. MURRAY
Associate Attorney General
Nuclear Division

cc: Edward M. Gitterman
Attorney, Department of Justice

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Mr. Charno
RECEIVED

ATTACHMENT E

JOHN MARSHALL, JR.

COUNSEL

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DEPT. OF JUSTICE
MAIL ROOM
5050
6050

BROWN, TODD & HEYBURN
(MARSHALL, COCHRAN, HEYBURN & WELLS)
BROWN, ELDRIDGE & BONNIE
BROWN, ARDERY, TODD & DUQUEEN
SIXTEENTH FLOOR
CITIZENS PLAZA
LOUISVILLE, KENTUCKY 40202

November 8, 1972

A-1480

l:r

Steven M. Charno, Esquire
Attorney, Department of Justice
United States Department of Justice
Washington, D. C. 20530

Re: Duquesne Light Company
Ohio Edison Company
Pennsylvania Power Company
Cleveland Illuminating Company and
Toledo Edison Company --
Beaver Valley Power Station, Unit No. 2

Dear Mr. Charno:

This will acknowledge receipt of your letter of November 3 in regard to the above matter. Our firm does represent AMP-O and will be getting comments to you by November 20, 1972 as requested.

Sincerely yours,
Philip P. Ardery

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ORIGINAL

6050 3014
11/11/72

21 NOV 13 1972
FBI - NEW YORK

Mr. Charno

ATTACHMENT F

ELIJAH BROWN, JR.
ROBERT TODD
RONALD H. HEYBURN
PHILIP M. ANDERTON
MARSHALL, COCHRAN, HEYBURN & WELLS
RANDOLPH A. BROWN
SAMUEL R. WELLS
GEORGE S. DUDLEY
EDWARD G. DONNIE
EDWARD B. HELM
WALTER D. DODGE, JR.
W. C. FISHER, JR.
JOHN T. GONDURANT
CHARLES S. GAOCHIE
MARSHALL P. COOPER, JR.
R. MARTIN ROCKAWAY
D. PATTER ROSEFREY
ELIJAH BROWN, IV
KENNETH J. TUOKE
EDWARD GLASCOCK
WILLIAM G. STONE
IRVIN KSELLER
TIMOTHY A. MARTIN

A-1480

1:r

Brown, Todd & Heyburn
(Marshall, Cochran, Heyburn & Wells)
(Brown, Elwood & Connell
(Brown, Ardrey, Todd & Dudley))
Sixteenth Floor
Citizens Plaza
Louisville, Kentucky 40202

JOHN MARSHALL, JR.
COUNSEL

602569-5420

November 17, 1972

**POOR
ORIGINAL**

Steven M. Charno, Esquire
United States Department of Justice
Washington, D. C. 20530

Re: Duquesne Light Company
Ohio Edison Company
Pennsylvania Power Company
Cleveland Illuminating Company and
Toledo Edison Company --
Beaver Valley Power Station, Unit No. 2

Dear Mr. Charno:

In response to your letter of October 19, this is to say that this firm does represent AMP-O, Inc. For your information the members of AMP-O as of October 14, 1972, are

Amherst	Columbus	Lebanon	New Bremen	Versailles
Blanchester	Cuyahoga Falls	Lodi	Niles	Wedsworth
Bloomdale	Deshler	Mendon	Orrville	Wapakoneta
Bowling Green	East Palestine	Minster	Piqua	Wellington
Bradner	Galion	Monroeville	Reading	Westerville
Bryan	Georgetown	Napoleon	Seville	
Celina	Hamilton		Shelby	
Cleveland	Hubbard		So. Vienna	
Columbiana	Jackson		St. Marys	

Also, for your information there is enclosed a map showing the municipal systems taking power from the applicants.

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Steven M. Churno, Esquire
November 17, 1972

L. OWN, TODD & HUNLERN

-2-

With regard to the four questions put to certain municipal systems in the service area of applicants for Beaver Valley Power Station, Unit No. 2, this is to say:

1. AMP-O nor any of its member citys have requested participation in the Beaver Valley Power Station Unit No. 2. In fact, we were unaware that the applicants had a second unit under consideration. It is a monopolistic trait or characteristic of investor-owned utilities that decisions of this nature are made behind closed doors and are made known to their municipal competitors only as an accomplished fact.

Robert Hillwig, AMP-O Vice President, and Superintendent of Bowling Green, Ohio, Municipal Utilities; and Power Luse, AMP-O Executive Manager, met on June 2 with Mr. Royce Moran, Vice President of Toledo Edison and Mr. Wendel Johnson, Manager, Fremont Division, for the purpose of exploring bulk power supply.

His answer was a courteous refusal couched in non-committting language. AMP-O intends to pursue the problem of wheeling contracts with the applicants. In 1968, Ohio Edison refused to sign the Buckeye Power Agreement which provided for wheeling of power from the Cardinal Generating plant to member RENCI's. Their reported comment was "We'll never wheel power for publicly financed systems."

2. AMP-O and its member municipalities will, in the event of a decision by SEC to allow the CECI-AEP merger now pending conditioned on the "Special Conditions", have bulk power supply available in the areas served by Ohio Power Company and Columbus & Southern Ohio Electric Company. However, for this power supply to be available in the areas served by the applicants, reasonable rates for wheeling must be available for them.
3. The applicants control all or most of the high voltage transmission in their respective service

**POOR
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Steven M. Chafne, Esquire
November 17, 1972

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areas. As long as they refuse reasonable wheeling rates, it is impossible to obtain bulk power supply from a source outside the service area. When they decline to provide a bulk power supply within the service area, they effectively deny access to bulk power supply.

A few other facts which we believe have a bearing upon the competitive effects of a grant of the license which we believe you should consider before rendering advice are as follows:

The Toledo Edison Company has been requested on at least three occasions to allow its transmission system to be used to transfer power from the Ohio Power Company's transmission system to the City of Napoleon's electric load center, upon payment of appropriate charges by Napoleon. Such transfer can be made over existing facilities and would not require the construction of new facilities or increasing the capacity of existing facilities. Toledo refuses to allow this. Toledo now allows its transmission system to be used in an identical manner for transfers of power from Ohio Power's transmission system to various load centers of rural electric cooperatives who are members of Buckeye Power, Inc.

Toledo has been requested on at least three occasions to operate its transmission system in continuous synchronism with Napoleon generators if Napoleon builds a 69 kv transmission line from its existing load center to a load center of the Tricounty Rural Electric Cooperative, Inc., which is interconnected with Toledo's transmission system for the delivery of power to Tricounty by Buckeye Power, Inc. Toledo now operates its transmission system in continuous synchronism with Napoleon's generators in supplying Napoleon with partial requirements bulk power in accordance with a wholesale rate schedule on file with the Federal Power Commission. Toledo refuses to allow its system to operate in continuous synchronism with Napoleon's generators if Napoleon purchases its partial power requirements from Tricounty. The same transmission system is involved whether Napoleon receives power from Toledo or Tricounty.

Toledo has been requested on at least one occasion to consider an arrangement with Napoleon for joint ownership of large, efficient generating facilities whether presently in service, under construction, or planned for the future. Toledo refuses to even consider such an

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Steven M. Charno, Esquire
November 17, 1972

BROWN, TODD & HUXBURN

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arrangement saying that they consider Napoleon to be the same as an industrial customer served under the terms and conditions of a retail rate schedule.

The above requests were made to W. Toyce Moran, Vice President, Administrative Services, and John B. Cloer, Manager, Southern District.

Napoleon's consulting engineers have negotiated for other sources of bulk power supply from which power can be obtained at a lower cost than from the present supplier, Toledo Edison Company. Use of Toledo's transmission lines would be required to obtain this power.

Toledo controls all of the transmission lines in the area of Napoleon, Ohio, that operate at a voltage level economically feasible for interconnection with Napoleon. This ownership is definitely a limiting factor in Napoleon's obtaining bulk power from alternative sources. If it is required to construct its own transmission facilities to the points of interconnection with alternative sources of power, the fixed charges for such transmission facilities in most cases would destroy the feasibility of securing power from the alternative sources. However, these sources are presently interconnected with Toledo's transmission system and hour-by-hour the power from these sources is co-mingled with Toledo's power over the same transmission lines.

If the municipal electric systems in Ohio had access to the transmission system of Toledo Edison Company, the overall generating reserves of the municipal systems in Toledo's service area could be lowered to the extent that an all-requirements purchaser, such as the City of Bowling Green, could be served by a municipal electric generating pool, which studies have shown would reduce their cost of bulk power supply considerably. The total generating capacity of the municipal electric systems in Ohio is in excess of 600 megawatts. If all of this generation could be interconnected by using the existing transmission systems in Ohio, the principles of economic dispatch could be used to obtain a substantial savings in the cost of bulk power supply to all of the municipal electric systems, as well as provide greater enhancement in power supply reliability.

The City of Cleveland has sought to intervene in the application of Cleveland Electric Illuminating Company and Toledo Edison for

**POOR
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Steven M. Charno, Esquire
November 17, 1972

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a permit to construct the Davis-Besse Nuclear Station. This attempt is opposed by CEI. Cleveland after having filed a complaint against CEI with the Federal Power Commission seeking a synchronous interconnection over the objection of CEI, has at last obtained an order from the Federal Power Commission directing such a synchronous interconnection. This effort of Cleveland has been resisted every step of the way by CEI, and to date there is no indication CEI will permit transfer of energy from other sources over its transmission system for the benefit of Cleveland.

As a consequence of CEI's unwillingness to coordinate power supply with the City of Cleveland there have been several serious blackouts in Cleveland and there continues a serious deficiency in reliability in the Cleveland system.

In the course of Cleveland's proceedings before the Federal Power Commission against CEI an in house memorandum of CEI to Lee C. Howley from R. H. Bridges dated October 9, 1970 was revealed which included such comments as the following direct quote:

"Five-Year Plan Objective -- 'To reduce and ultimately eliminate the tax-subsidized Cleveland and Painesville Municipal Electric System.'"

Though we believe it may be an exercise in futility, concurrently with the writing of this letter the President of AMP-O is writing letters to Ohio Edison Company, Cleveland Electric Illuminating Company and Toledo Edison Company asking the following questions:

1. Would you be willing to allow participation in bulk power generation?
2. Would you be willing to wheel power? At what rates?
3. Will you accept bulk power from an outside source for delivery to a member system in your service area?

POOR
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Steven M. Charno, Esquire
November 17, 1972

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4. Will you be willing to wheel power from one member system to another?

Though the foregoing comments are by no means complete in detail, we believe they do give clear-cut indication of the monopolistic practices engaged in by the applicants which should be the basis of an evidentiary hearing before the Atomic Energy Commission.

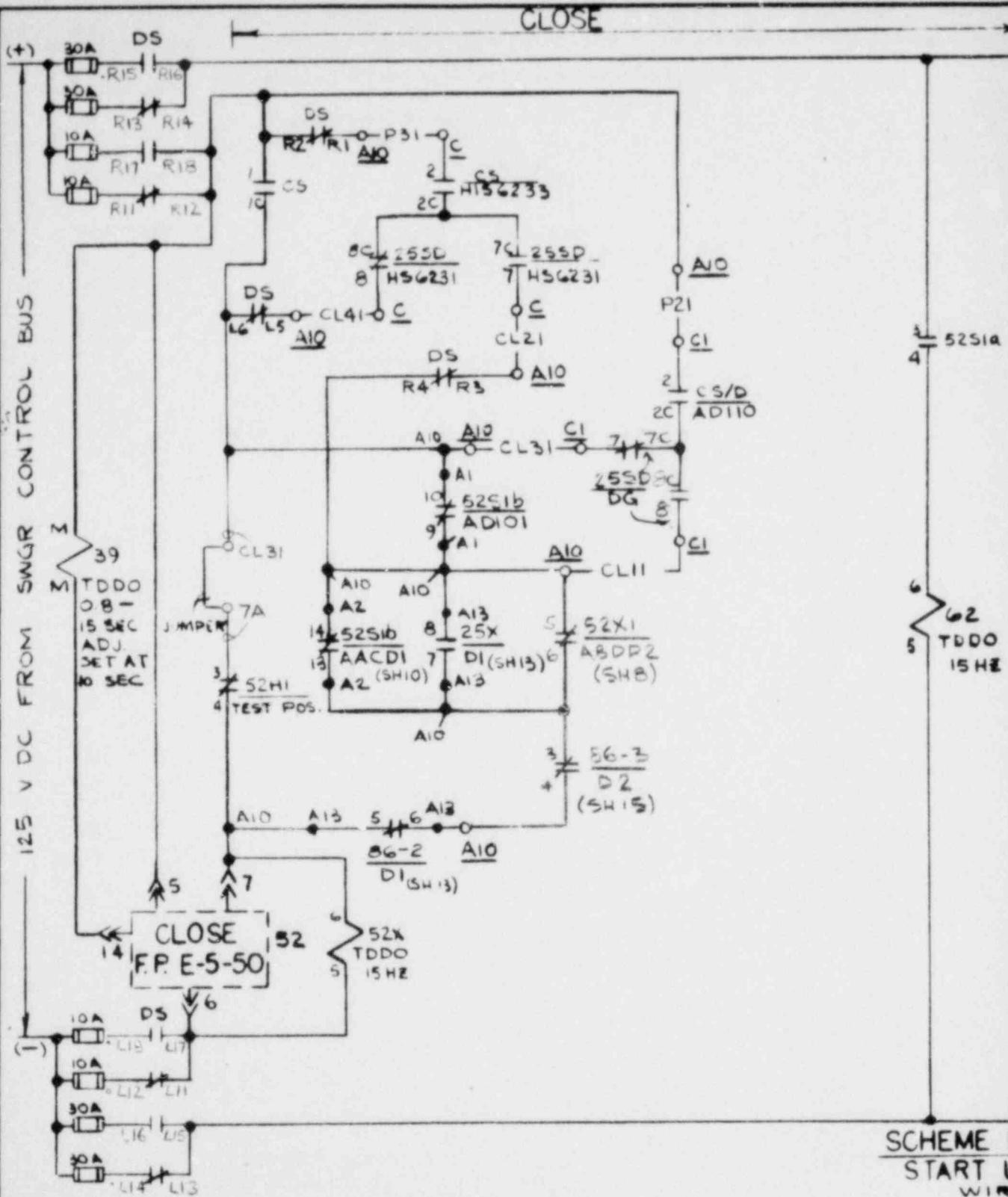
Yours very truly,

Philip P. Ardery

Enclosure ✓

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REV.	DESCRIPTION	DATE	DR	CHK	SUPV	CHIEF	PROJ.	OWNER	OWNER
5	INC DCN 3029 (REF E 778)	7-18-77	mm	ml	ml	ml	-	-	-
1	CHANGED 29415 EQUIPMENT NUMBERS & REVISED AS NOTED	9-17-74	DUE	NEW	TIME	-	-	-	-
0	ISSUED FOR CONSTRUCTION	10-10-74	ONE	ONE	ONE	ONE	ONE	ONE	ONE

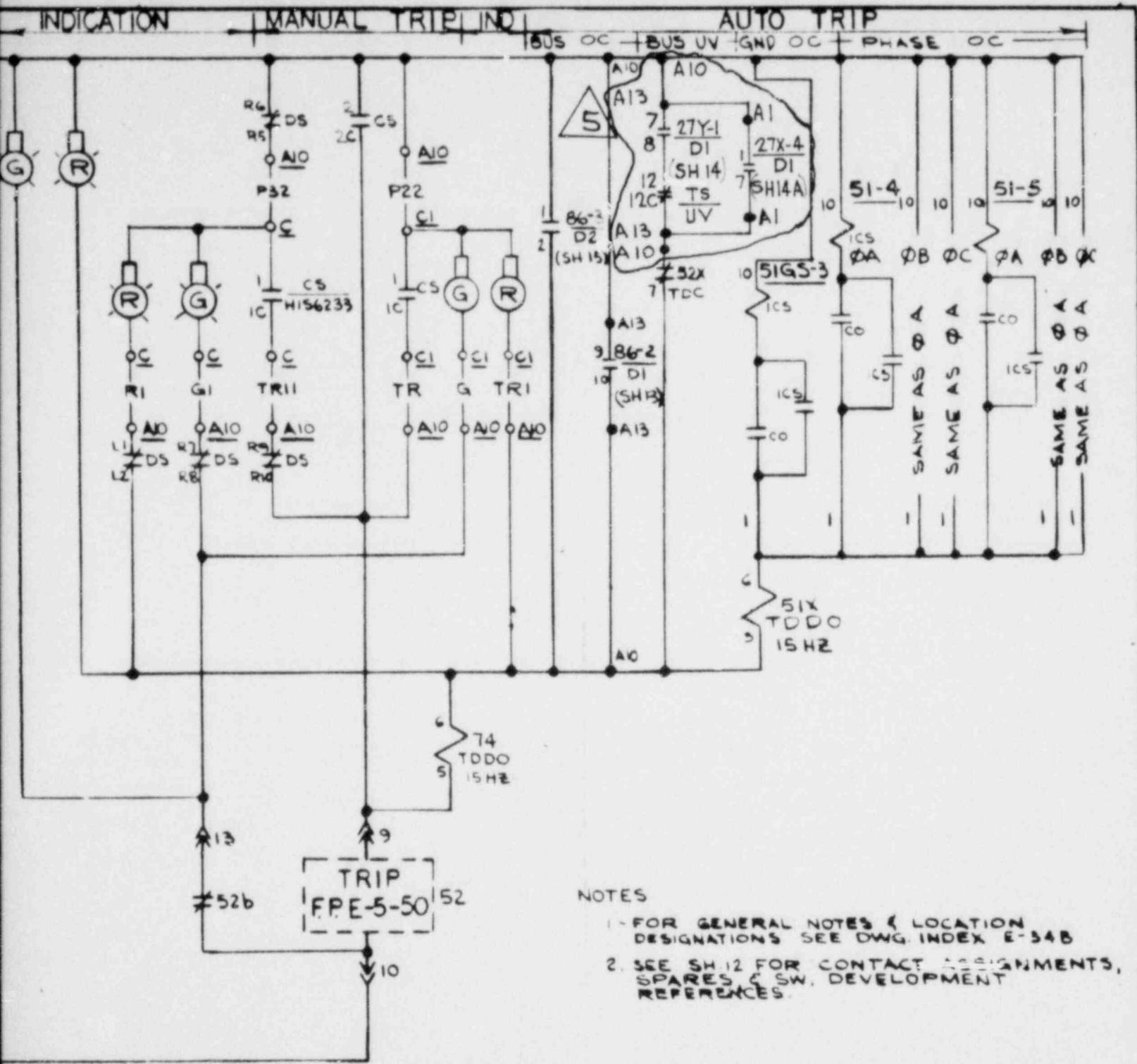


P32, RIGI, TRII,
C P31, CL41, CL21
(C)

CLII CL²¹ P22

A10 TRGTRI, P21
(D) CI

BLOCK DIAGRAM
SCHEME N° AD110



AD110 CHANNEL 2

SYSTEM N° 004

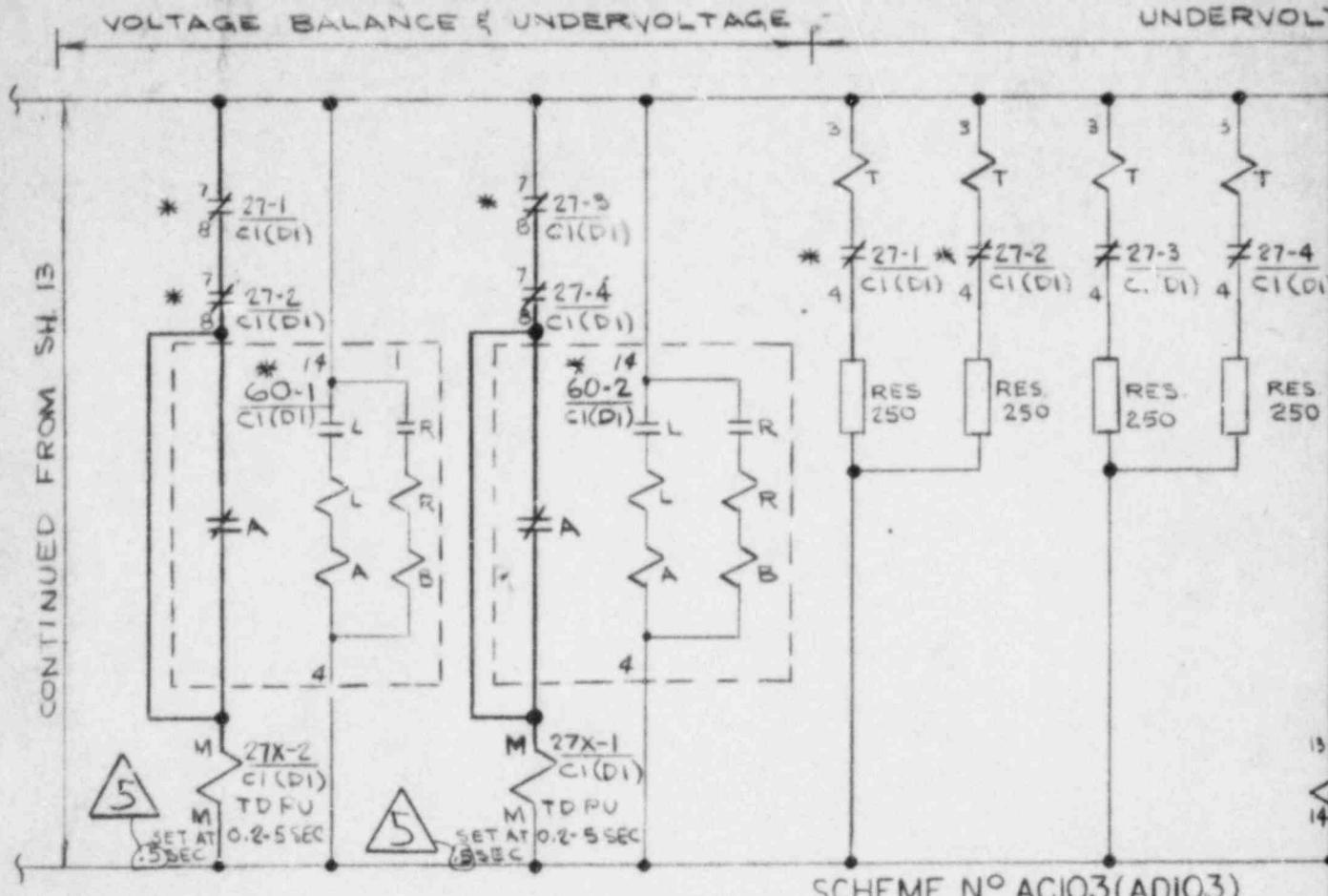
PREFIX DD

EQUIPMENT NUMBERS

A10 - AD110
C - C5715
C1 - C3616
A23 - AD203
A9 - ABDD2
A13 - AD103
A1 - AD101
A2 - AACDI

DAVIS-BESSE NUCLEAR POWER STATION		THE TOLEDO EDISON COMPANY	
		THE CLEVELAND ELECTRIC ILLUMINATING COMPANY	
ELEMENTARY WIRING DIAGRAMS			
4.16 KV FD BRKRS			
BUSES D1,D2 TIE BRKR AD110			
CONTROL 8002 200 844			
BECHTEL COMPANY	JOB NO.	DRAWING NO.	REV.
	7749	E-34B SH.11	5

REVISED AS NOTED: INC SRN 159E		REVISED FOR USE IN 236E		REV. DESCRIPTION	
4					
10					
0					



SCHEME N° AC103(AD103)

27Y-1 TS UV
C1(D1) C1(D1)

CONTACTS	FUNCTION	DWG REF
1-2	IND. LT	THIS SH
3-4 10-11-12	OPERATE 27X-2 RELAY 5	SH14A
5-6 11-12	TRIP ITRLK BRKR ABDC1 AACD1	SH3 (9)
7-8 12-13	TRIP ITRLK ACT10 BRKR (AD110)	SH5 (11)
9-10 12-13	SFAS SEQUENCER CH1(CH2)	FPE-30-33(41)
11-12 14-15	SPARE	

27Y-2 TS/UV
C1(D1) C1(D1)

CONTACTS	FUNCTION	DWG REF
1-2	IND. LT	THIS SH
3-4 9-10-12	OPERATE 27X-3 RELAY	THIS SH
5-6 5-12	TRIP ITRLK BRKR AC105 (AD105)	E-49B SH18
7-8 6-12	TRIP ITRLK BRKR AC111 (AD111)	E-52B SH5B
9-12 7-12	TRIP ITRLK ACT12 BRKR (AD112)	E-52B SH6B
11-12 8-12	SFAS SEQUENCER CH3(CH4)	FPE-30-32(42)

27Y-3 TS
C1(D1) C1(D1)

CONTACTS	FUNCTION	DWG REF
1-2	IND. LT	THIS SH
3-4 9-10-12	OPERATE 27X-3 RELAY	THIS SH
5-6 5-12	TRIP ITRLK BRKR AC105 (AD105)	E-49B SH18
7-8 6-12	TRIP ITRLK AC111 (AD111)	E-52B SH5B
9-12 7-12	TRIP ITRLK ACT12 BRKR (AD112)	E-52B SH6B
11-12 8-12	SFAS SEQUENCER CH3(CH4)	FPE-30-32(42)

27Y-3
C1(D1)

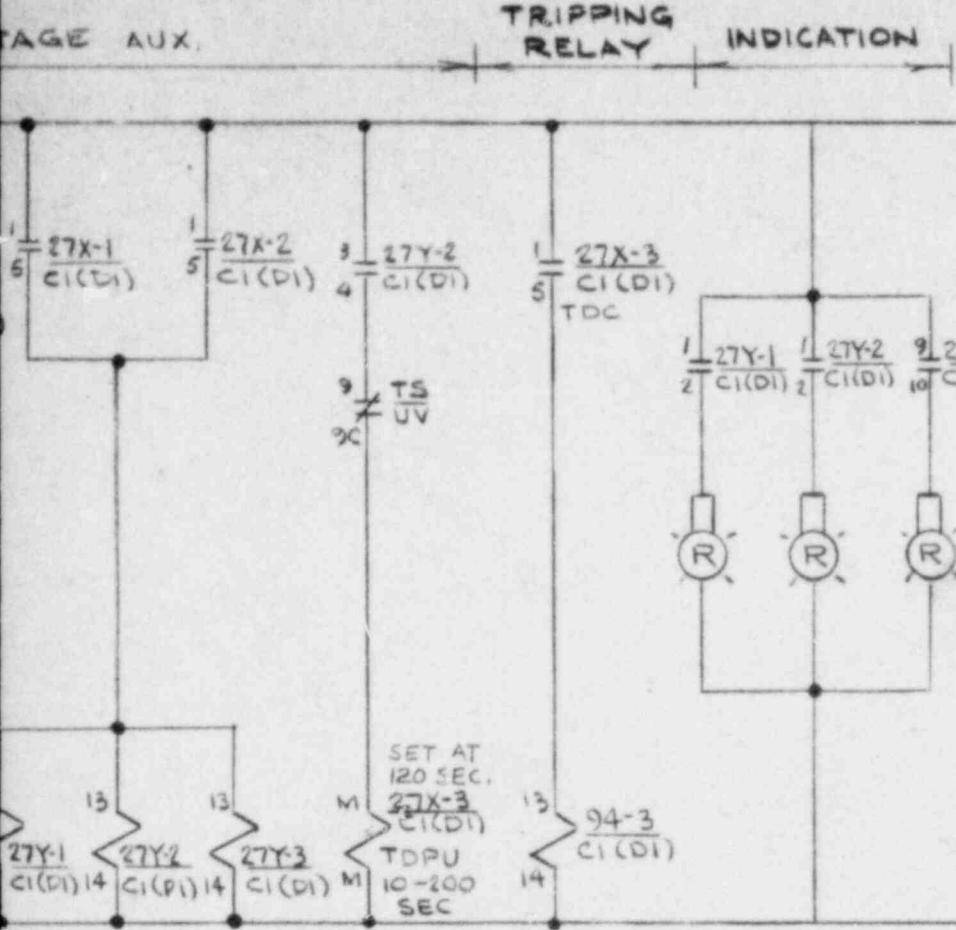
CONTACTS	FUNCTION	DWG REF
1-2	SPARE	
3-4	SPARE	
5-6	SPARE	
7-8	SPARE	
9-10	SPARE	
11-12	SPARE	

TS/UV
C1(D1)

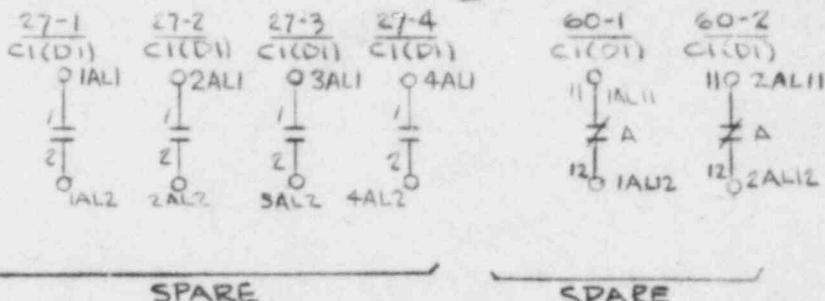
CONTACTS	FUNCTION	DWG REF
21-21	SPARE	
22-22	SPARE	
23-23	SPARE	
24-24	SPARE	

27X-1
C1(D1)
O-116
27X360
6
TDC-2
27X320
27X-1
C1(D1)
O-116
27X12

*SEE DWG 7749-E-22 SH1(SH2)
FOR 27-1 THRU 4 & 60-1,-2

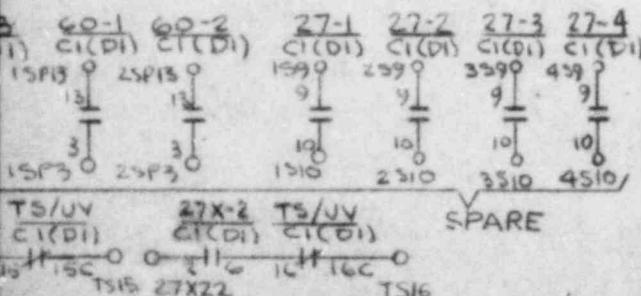


FUNCTION	DWG REF
SPARE	
TRIP ITRLK BRKR AC104 (AD103)	E-48B SH.6B
SPARE	
TRIP ITRLK BRKR AC107 (AD107)	E-48B SH.6B
IND LT	THIS SH
SPARE	



NOTES

- FOR GENERAL NOTES & LOCATION DESIGNATIONS SEE DWG INDEX E-34B
- FOR TS UV DEVELOPMENT, SEE DWG E-30B, SH.11, FIG.6



BUS C1(DI) AUX
UNDER VOLTAGE RELAYS
E-64B SH.1E (2E)

DAVIS-BESSE NUCLEAR POWER STATION
THE TOLEDO EDISON COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

ELEMENTARY WIRING DIAGRAMS
4.16 KV FD BRKRS
BUS C1 (DI) VOLTAGE & AUX RELAYS

BECHTEL COMPANY	JOB NO.	DRAWING NO.	REV.
	7749	E-34B SH.14	5