TOLEDO EDISON

A Centerior Energy Company

DONALD C. SHELTON
Vice President—Nuclear
(419) 249-2300

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United States Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Fire Protection - Summary of Differences Between Compliance Assessment Report Analysis and the Fire Area Optimization Report

Gentlemen:

Attachment 1 to this letter provides a detailed summary of the differences between the Compliance Assessment Report (CARP) Revision 5, and the attached Fire Area Optimization Report (FAOR), Revision 1 (Attachment 2). CARP Revision 5 was transmitted to the NRC on December 18, 1989 (Serial Number 1746). The FAOR represents the anticipated Davis-Besse plant configuration at startup from the 6th refueling outage currently underway and will supersede the CARP for the purpose of demonstrating compliance to Appendix R.

Copies of FAOR Revision 1 were provided to Mr. Ken Sullivan and Mr. Rudy Hodor at Brookhaven National Laboratory on May 2, 1990 to facilitate completion of their Davis-Besse Fire Protection inspection reviews.

By letter dated March 22, 1990 (Serial 1788) Toledo Edison requested a License Amendment to change License Condition 2.C(4). In the discussion for items 16 through 20 in that letter, Toledo Edison supported the proposed License Condition changes in part by reference to the CARP, which documented compliance with Appendix R safe shutdown separation requirements. The FAOR now provides the documentation that demonstrates compliance with Appendix R Section III.G, with the Kaowool wrap removal or replacement as described in items 16 through 20 of Serial 1788.

If you have any questions concerning this matter, please contact Mr. R. W. Schrauder, Manager - Nuclear Licensing, at (419) 249-2366.

Very truly yours,

DCW/ssg

Attachments

cc: P. M. Byron, DB-1 NRC Senior Resident Inspector
A. B. Davis, Regional Administrator, NRC Region III
T. V. Wambach, DB-1 NRC Senior Project Manager

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Comparison of Differences Between the Appendix R Compliance Assessment Report (CARP) (Rev. 5) and the Fire Area Optimization Report (FAOR) (Rev. 1)

Background

The Compliance Assessment Report (CARP) was written to document compliance with Appendix R for the Davis-Besse Nuclear Power Plant. The most current revision of the CARP, (i.e., Revision 5) was transmitted to the NRC on December 18, 1989 (Serial Number 1746). Fifty-six Appendix R fire areas are analyzed in the CARP. In 1987, Toledo Edison began the Fire Area Optimization process. Fire Area Optimization consolidated the 56 areas analyzed in the CARP into 44 areas and reanalyzed these 44 areas for compliance with Appendix R.

The Fire Area Optimization Report documented the Area Optimization process. Revision 0 of the FAOR was transmitted to the NRC on April 25, 1990 (Serial Number 1801). The intent of the FAOR was to supersede the CARP as Toledo Edison's documentation of compliance with Appendix R. Revision 1 of the FAOR resulted from a review to identify any inconsistencies in the document and is attached.

The sections which follow provide a discussion of the specific differences between the CARP and the FAOR. Unless otherwise indicated all references to these documents are to Revision 5 of the CARP and Revision 1 of the FAOR. The general differences between the CARP and the FAOR are:

- The CARP analyzed 56 Appendix R fire areas; The FAOR consolidated and reanalyzed 44 Appendix R fire areas.
- The FAOR underwent certain format changes and section redefinition to enhance its use.
- The FAOR incorporated information contained in TE letter dated February 16, 1990 (Serial 1757).
- The FAOR incorporated into each fire area information such as certain "generic" manual actions which had previously resided in documents other than the CARP.
- Certain historical information contained in earlier submittals was not included in the FAOR.

The CARP to FAOR differences are described in the following sections on Format, Content, and Detailed Changes.

Format

A contents cross reference is attached to show how the information from the CARP has been incorporated into the FAOR. The left side of the cross reference is the existing CARP Table of Contents. Entries are shown in the right column for the section where information on the same subject

is found in the FAOR. The text from the CARP was not directly incorporated into the FAOR. In many cases the CARP information was consolidated for the FAOR by summarizing or by referencing other sections or documents. The Contents Cross Reference specifically notes where additional information has been added to the FAOR or where information from the CARP has been deleted.

For the individual Fire Areas in Section 4.0, the format of the FAOR is the same as that of the CARP except:

- The Table 1 for each fire area in the CARP tabulates relevant safe shutdown analysis information only for equipment and circuits that are located in the fire area. The FAOR safe shutdown analysis table lists all plant equipment for the accredited train and its location (Fire Area). The CARP Table 1 fields "Proposed Modification" and "Procedure" have been incorporated into the FAOR safe shutdown table "Required Change" and "Notes" fields in each fire area section.

- Safe shutdown circuits listed in CARP fire area descriptions in Section 4.6 now appear in FAOR Appendix B-2, which is a plant-wide safe shutdown cable list sorted by Fire Area.

- The CARP Fire Area Compliance Summary has been divided into three sections, Fire Propagation Control, Fire Detection and Suppression, and Fire Area Safe Shutdown Summary in the FAOR. The information for the first of these two sections has been incorporated from the Fire Hazards Analysis Report.

Content

The following additional information on content changes supplements the CARP/FAOR contents cross reference.

CARP Sections 1.0 & 7.0: Compliance Assessment Report (CARP) Section 1.0, "Introduction and Summary" contains background and summary information only. The "Introduction and Summary" in the Fire Area Optimization Report (FAOR) is a condensed version of CARP Section 1.0. CARP Section 7.0, "Alternate Shutdown Capability" was condensed in the FAOR to remove the historical information docketed earlier concerning responses to the clarification to Generic Letter 81-12. The condensed CARP Section 7.0 was incorporated into FAOR Section 1.4.

CARP Section 2.0: CARP Section 2.0, "References" lists reference documents that support the CARP analysis. FAOR Section 2.0 reflects an update of the references, including the addition of Toledo Edison Request for Assistance (RFAs) documents.

CARP Section 3.0: CARP Section 3.0, "Safe Shutdown Systems, Components and Circuits" contains summary information of the methodology and the resultant safe shutdown systems, components and circuits. The Fire Area Optimization

Report Section 3.0 discusses the same subjects with a clarification of some of the information and inclusion of relevant information from the previously referenced CARP reports. For example, the revised information includes a discussion of high/low pressure interface valves, the establishment of Reactor Coolant Pump seal injection and seal return, and deletion of Heating, Ventilation, and Air Conditioning Systems no longer required to support safe shutdown. Also, discussion of two safe shutdown systems (i.e., Safety Features Actuation System and Steam and Feedwater Rupture Control System) has been provided in the FAOR which was not in the CARP.

CARP Section 4.0: CARP Section 4.0, "Appendix R, Section III.G Evaluation" and the CARP Appendices A, B-1, B-2, C-1, C-2 and C-3 contain the evaluation to assure safe shutdown capability and the fire area circuit routings. FAOR Section 4.0 contains a new fire area safe shutdown analysis presented in the format described above. Because FAOR Section 4.0 contains the details of the fire area safe shutdown analysis, this is the section where the technical model changes are reflected. A listing of general changes that have been incorporated into the safe shutdown analysis follows. Items 1 through 7 are model changes. Items 8 through 11 are technical in nature and do not represent model changes, but rather, present information not previously contained in the CARP.

1. Additional manual operator actions due to modeling a potential actuation of the Safety Features Actuation System (SFAS) possibly resulting in the loss of two essential inverters have been addressed as described in TE letter dated February 16, 1990 (Serial 1757), Attachment 1, Item 1.

2. Reactor Coolant System letdown path restoration as described in the TE letter dated February 16, 1990 (Serial 1757) Attachment 1, Item 2 and Attachment 2, Item 4, has been added.

3. Reactor Coolant Pump seal injection and seal return restoration as described in TE letter dated February 16, 1990 (Serial 1757) Attachment 2, Item 3, is included.

4. Changes to Fire Area boundaries due to area optimization are reflected.

5. Addition of manual operator actions resulting from modeling actuation of the Steam and Feedwater Rupture Control System (SFRCS) resulting from the assumed loss of offsite power have been addressed. This model change is similar to Item 1 above.

6. In three fire areas the train accredited for safe shutdown changed as follows:

   a. Fire Area II went from a Train 1 to a Train 2 area because of changes in the Fire Area boundary.

   b. Fire Area DH went from a Train 1 to a Train 1/2 area to incorporate consideration of mechanical safe shutdown components in the analysis.

c. Fire Area R went from a Train 1/2 to a Train 2 area because of a circuit reroute modification.

7. Pertinent 5th and 6th refueling outage modification information was incorporated in the model and notes to the table.

8. Mechanical components required for safe shutdown were identified. Previously only electrical components were included in the CARP.

9. Additional manual actions for loss of station air were specifically included for the appropriate fire areas in the FAOR. Previously in the CARP, the loss of station air was addressed by a generic note.

10. Additional manual actions for spurious actuation of nonaccredited equipment are included in the FAOR. Previously, the information was contained in a separate report referenced by the CARP.

11. A more complete listing of the intermediate power supplies (i.e., 4160V, 480V and 120V) was included in the FAOR tables. Previously not all of the intermediate power supplies were listed. For example, the CARP listed power supply D1P for a component and the FAOR references all the panels between D1P and the component.

CARP Section 5.0: CARP Section 5.0, "Associated Circuits" contains a summary description of the methodology and criteria for the review and resolution for the three categories of associated circuits of concern (i.e., common power sources, spurious actuation of components, and common enclosure). The FAOR section on common power sources contains the same basic information with updates to reflect the modifications to resolve the coordination concerns. The evaluation of possible spurious actuation of equipment was included in the circuit analysis performed for safe shutdown equipment as documented in FAOR Section 4.0 and was not included within FAOR Section 5.0. The revised FAOR Section on common enclosures contains the same type of summary information as the CARP. A new FAOR section referencing the multiple high impedance fault analysis was added.

CARP Section 6.0: CARP Section 6.0, "Emergency Lighting" contains an evaluation of the emergency lighting requirements for the safe shutdown procedures and the lighting additions to resolve the concerns. The FAOR section reflects a walkdown of the new (post 6th RFO) safe shutdown procedures to reflect the optimized areas and the sixth refueling outage modifications. The FAOR section also reflects the planned modification for additional emergency lighting.

CARP Section 8.0: CARP Section 8.0, "Oil Collection System for Reactor Coolant Pump" contains a discussion of the lube oil collection system, which was extracted principally from the NRC exemption approval letter. FAOR Section 1, Table 3, Summary of Exemptions, and Section 4.0 for Fire Area D cover the subject in summary form.

Detailed Changes

The detailed changes to the safe shutdown analysis tables are provided in the following markups of the tables. The changes to each fire area table are not provided because these can be characterized by changes to the safe shutdown component list. A markup of the FAOR safe shutdown component list (Appendix A) is attached, showing changes from the CAR. Similarly, tables showing the changes in associated circuits analysis are provided. Instructions for using the tables precede each table.

TOLEDO EDISON COMPANY

DAVIS-BESSE NUCLEAR POWER STATION

COMPLIANCE ASSESSMENT REPORT AND FIRE AREA OPTIMIZATION REPORT

CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
1.0 INTRODUCTION AND SUMMARY		1.0 INTRODUCTION
1.1 Background		1.0 Introdution
1.2 Purpose of Report		1.1 Purpose of Report
1.3 Scope of Report		1.0 Introduction
1.4 Review Methodology		1.2 Methodology
1.5 Summary of Results		1.3 Summary of Results
1.6 Definitions, Abbreviations, and Equipment/Cable Numbering Systems		1.5 Definitions, Abbreviations, and Equipment/Cable Numbering Systems
		Added Section 1.4 to incorporate summary-level information from CARP, Section 7.0
Table 1-1 Fire Area Compliance Overview		Deleted - Contained no information not in other report sections
Table 1-2 Summary of Exemption Requests		Table 3 Summary of Exemptions
2.0 REFERENCES		2.0 REFERENCES
2.1 Drawings		2.1 Drawings
2.2 Procedures		2.2 Procedures
2.3 Reports		2.3 Reports
2.4 NRC Documents		2.4 NRC Documents
2.5 Letters		2.5 Letters
2.6 Calculations		2.6 Calculations
		Added 2.7 Request for Assistance (RFAs)
3.0 SAFE SHUTDOWN SYSTEMS, COMPONENTS AND CIRCUITS		3.0 SAFE SHUTDOWN SYSTEMS, COMPONENTS AND CIRCUITS
3.1 Introduction		3.1 Introduction
3.2 Performance Goals		3.2 Performance Goals
3.3 Safe Shutdown Functions		3.3 Safe Shutdown Functions
3.4 Requirements and Assumptions		3.4 Requirements and Assumptions
3.5 Safe Shutdown Systems Determination		3.5 Safe Shutdown Systems Determination
3.6 Safe Shutdown Systems		3.6 Safe Shutdown Systems

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
3.7 Safe Shutdown System Components		3.7 Safe Shutdown System Components
3.8 Safe Shutdown System Circuits		3.8 Safe Shutdown System Circuits
3.9 Plant Communications and Security		3.9 Plant Communications and Security
Table 3-1 Safe Shutdown Systems		Table 3-1 Safe Shutdown Systems
4.0 APPENDIX R, SECTION III.G EVALUATION		4.0 APPENDIX R, SECTION III.G EVALUATION
4.1 Introduction		4.1 Introduction
4.2 Requirements		4.2 Requirements
4.3 Assumptions		4.3 Assumptions
4.4 Evaluation Methodology		4.4 Evaluation Methodology
4.5 Methods of Achieving Compliance		4.5 Methods of Achieving Compliance
4.6 Fire Area Evaluations		4.6 Fire Area Evaluations
4.6.A Fire Area A		4.A
4.6.AA Fire Area AA		4.X
4.6.AB Fire Area AB		4.AB
4.6.AC Fire Area AC		4.AC
4.6.B Fire Area B		4.B
4.6.BB Fire Area BB		4.Y
4.6.BD Fire Area BD		4.BD
4.6.BE Fire Area BE		4.BE
4.6.BF Fire Area BF		4.BF (now includes Room 52A)
4.6.BM Fire Area BM		4.BM
4.6.BN Fire Area BN		4.BN
4.6.C Fire Area C		4.A
4.6.CC Fire Area CC		4.CC
4.6.D Fire Area D		4.D
4.6.DA Fire Area DA		4.A (east half of CARP Area DA) & 4.AB (west half of CARP Area DA)
4.6.DB Fire Area DB		4.A
4.6.DC Fire Area DC		4.AB
4.6.DD Fire Area DD		4.DD

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION		VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
4.6.DE	Fire Area DE		4.AB
4.6.DF	Fire Area DF		4.DF
4.6.DG	Fire Area DG		4.DG
4.6.DH	Fire Area DH		4.DH
4.6.DJ	Fire Area DJ		4.A
4.6.E	Fire Area E		4.E
4.6.EE	Fire Area EE		4.EE
4.6.F	Fire Area F		4.F
4.6.FF	Fire Area FF		4.FF
4.6.G	Fire Area G		4.G
4.6.HA	Fire Area HA		4.AB
4.6.HH	Fire Area HH		4.HH
4.6.I	Fire Area I		4.G
4.6.II	Fire Area II		4.II (now also includes FHAR Areas II, NN, QQ, OO, YY, JJ, TT, RR, LL, MM, PP, and Room 508)
4.6.J	Fire Area J		4.J
4.6.K	Fire Area K		4.K
4.6.L	Fire Area L		4.J
4.6.M	Fire Area M		4.K
4.6.MA	Fire Area MA		4.MA
4.6.MB	Fire Area MB		4.BB
4.6.MC	Fire Area MC		4.MC
4.6.ME	Fire Area ME		4.ME
4.6.MF	Fire Area MF		4.MF
4.6.MG	Fire Area MG		4.MG
4.6.P	Fire Area P		4.P (now also includes FHAR Areas P, O, and N)
4.6.PP	Fire Area PP		4.II
4.6.Q	Fire Area Q		4.Q
4.6.QQ	Fire Area QQ		4.II
4.6.R	Fire Area R		4.R
4.6.S	Fire Area S		4.S
4.6.T	Fire Area T		4.T
4.6.U	Fire Area U		4.U

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
4.6.UU Fire Area UU		4.UU (now also includes FHAR Areas UU and AB1 Stairwell and EL2 elevator shaft)
4.6.V Fire Area V		4.V
4.6.W Fire Area W		4.X
4.6.X Fire Area X		4.X
4.6.Y Fire Area Y		4.Y
4.6.Z Fire Area Z		4.Y
		Added the following Fire Areas to the FAOR
		4.BG (includes Rooms 53, 53A, 250 and 251 previously in CARP Area II)
		4.BH (includes Fire Areas BI, BJ, and BH as defined in FHAR)
		4.KK (includes Area KK as defined in the FHAR)
		4.Duct (Added Duct)
		4.MH (Manhole 3009)
		4.OS (Outside plus FHAR Areas BL and BK)
		4.RW (Low Level Radwaste Building)
		4.PS (Personnel Shop Facility)
		4.OF (Old Office Building, including FHAR Areas SS and VV)
		4.VA (AB3A Stairwell)
		4.AD (FHAR Area AD, plus AB2 Stairwell and EL3 Elevator Shaft)
Table 4-1 Precautionary Note Appendix R, Section III.G Compliance Summary		Deleted - Where appropriate, information incorporated into individual fire area databases
5.0 ASSOCIATED CIRCUITS		5.0 ASSOCIATED CIRCUITS
5.1 Common Power Source Analysis		5.1 Common Power Source Analysis
5.1.1 Introduction		5.1.1 Introduction
5.1.2 Assumptions		Deleted - Information on assumptions in 5.1.2
5.1.3 Methodology		5.1.2 Methodology
5.1.4 Results		Deleted - Appendix C-3 has results information

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
5.2 Spurious Actuation Analysis		Deleted – Detailed information incorporated in Section 4.0 for applicable fire areas
5.2.1 Introduction		
5.2.2 Assumptions		
5.2.3 Methodology		
5.2.4 Results		
5.3 Common Enclosure Analysis		5.2 Common Enclosure Analysis
5.3.1 Introduction		5.2.1 Introduction
5.3.2 Assumptions		5.2.2 Assumptions
5.3.3 Methodology		5.2.3 Methodology
5.3.4 Results		5.2.4 Results
		Added Section 5.3 Summary of Multiple High Impedance Fault Analysis
Table 5-1 Safe Shutdown Components Evaluated for Spurious Actuation		Deleted – Information incorporated in Section 4.0 for applicable fire areas
6.0 EMERGENCY LIGHTING		6.0 EMERGENCY LIGHTING
6.1 Introduction		6.1 Introduction
6.2 Emergency Lighting Evaluation for a Fire in the Control Room or Cable Spreading Room		Deleted – FAOR incorporates methodology only as follows:
6.2.1 Methodology		6.2 Assumptions and Basis for Evaluation
6.2.2 Essential Emergency Lighting Circuit Review		6.3 Emergency Lighting Evaluation
6.2.3 Conclusions and Proposed Resolutions		6.4 Conclusions

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING	FAOR REVISION 1 SECTION
6.3 Emergency Lighting Evaluation for a Fire Outside the Control Room or Cable Spreading Room		Deleted – See note above
6.3.1 Introduction and Scope		
6.3.2 Assumptions		
6.3.3 Methodology		
6.3.4 Results/Recommendations		
Table 6-1 Summary of Results of the Emergency Lighting Evaluation for a Fire in the Control Room/Cable Spreading Room		Deleted – See note above
Table 6-2 Emergency Lighting Evaluation for a Fire in the Control Room/Cable Spreading Room Results (by Room)		Deleted – See note above
Table 6-3 Emergency Lighting System Modifications Identified from an Evaluation of a Serious Control Room/Cable Spreading Room Fire		Deleted – See note above
Table 6-4 Components Requiring Emergency Lighting for a Serious Plant Fire		Deleted – See note above
Table 6-5 Lighting Requirements per Fire Area for a Serious Plant Fire		Deleted – See note above
Table 6-6 Summary of Recommendations for a Serious Plant Fire		Deleted – See note above
7.0 ALTERNATE SHUTDOWN CAPABILITY		7.0 ALTERNATE SHUTDOWN CAPABILITY
7.1 Introduction		Section 1.4 Alternate Shutdown Capability.
7.2 Response to NRC Clarification to Generic Letter 81-12		Deleted – One time response to requirements of Generic Letter 81-12
7.3 Alternate Shutdown Capability for a Fire in the Control Room or Cable Spreading Room		Section 4.DD and 4.FF – Safe Shutdown Analysis Table

CARP and FAOR CONTENTS CROSS REFERENCE

CARP REVISION 5 SECTION	VERSUS CORRESPONDING FAOR REVISION 1 SECTION
Table 7-1 Alternate Shutdown Methods to Meet the Requirements of Section III.G.3 for Fire Area EE	Section 4.EE - Safe Shutdown Analysis Table contains alternate shutdown information
Table 7-2 Alternate Shutdown Methods to Meet the Requirements of Section III.G.3 for Fire Area AB	Deleted - No longer an alternate shutdown area
Table 7-3 Alternate Shutdown Methods to Meet the Requirements of Section III.G.3 for Fire Areas T and U	Deleted - No longer an alternate shutdown area
Table 7-4 Alternate Shutdown Methods to Meet the Requirements of Section III.G.3 for Fire Area BF and R	Sections 4.BF and 4.R - Safe Shutdown Analysis Table contains alternate shutdown information
8.0 OIL COLLECTION SYSTEM FOR REACTOR COOLANT PUMP	8.0 OIL COLLECTION SYSTEM FOR REACTOR COOLANT PUMP
8.1 Introduction 8.2 Issued Exemption for RCP Oil Collection System	Section 1.0 - Table 3 Summary of Exemptions
APPENDIX A: Table of Contents Safe Shutdown Components List Safe Shutdown Components Database Notes	APPENDIX A: Safe Shutdown Component List and and Notes
APPENDIX B-1: Circuit/Subcomponent Location Summary by System	APPENDIX B-1: Optimized Fire Area Circuit Routing for Safe Shutdown (same information, new title)
APPENDIX B-2: Circuit/Subcomponent Location Summary by Fire Area	APPENDIX B-2: Optimized Fire Area Circuit Routing for Safe Shutdown Cables (same information, new title)
APPENDIX C-1: Associated Circuit Location Summary by Power Source	APPENDIX C-1: Optimized Circuit Routing for Safe Shutdown (same information, new title)
APPENDIX C-2: Associated Circuit Location Summary by Fire Area	APPENDIX C-2: Optimized Circuit Routing for Safe Shutdown Cable in Fire Area (same information, new title)
APPENDIX C-3: Associated Circuit Evaluation Summary	APPENDIX C-3: Same information. Now called Breaker Coordination Evaluation Summary
DRAWINGS: (Drawing copies are latest revisions available at time of CARP revision)	Drawings are controlled separately - not part of FAOR.

FAOR APPENDIX A "SAFE SHUTDOWN COMPONENT LIST"

A markup of the additions or changes to the FAOR Appendix A Safe Shutdown Component List from the CARP is provided. Certain changes are not marked since they do not affect the analysis (i.e., changes to the description of the component, to the P&ID reference, to the Elementary Wiring references, etc.). The key areas of the FAOR Appendix A which affect the analysis are the columns identified as: (a) Train, (b) Component, (c) Normal Position, (d) Shutdown Position, (e) Failed Position, (f) This Component Alternate Shutdown For, (g) High/Low, Spurious, Boundary, (h) Power Supply, and (i) Circuit Scheme. Only changes to these fields are marked with boxes in this submittal.

The numbers shown to the right of the boxed areas provide the reason for the change as follows:

1. A change to show the final power supply to the component was made. Previously an upstream power supply may have been shown. This change allows a consistent way to identify the intermediate power supplies by referring to the Essential Power System listing in FAOR Appendix A. All of the intermediate power feeds are shown for each component power feed in the Essential Power system list section of Appendix A to the FAOR.

2. Components added to the list such as: (a) mechanical components identified, (b) support system components, and (c) components to support Reactor Coolant System Pump seal injection and seal return.

3. Circuit identification was corrected.

4. Corrections such as: (a) correct identification of train designations, (b) correct identification of the component normal, shutdown or failed position, (c) correct identification of the component that alternate shutdown is provided for, and (d) correct identification for High/Low, spurious, boundary identification.

Boxed information designated with a number 1 or 2 in the right margin indicates that all the information in the remaining columns to the right of the boxed area is new or changed to support the component addition or power supply change. Boxed information designated with a number 3 or 4 in the right margin indicates that only the boxed information is new or changed.

Components that were deleted from the CARP in the FAOR tables are not shown on the table markups. Deletions are listed separately on the following sheet.

DELETION OF PREVIOUSLY ANALYZED SAFE SHUTDOWN COMPONENTS

1. The following Heating, Ventilation and Air Conditioning (HVAC) requirements were deleted. C31-1, 2, 3, 4, 5 (ECCS pump room ventilation fans) are deleted based on revised HVAC analysis that these coolers are not required to maintain the room temperature. C75-1, C75-2; HV5443A, B, C; HV5444A, B, C (component cooling water pump room fans and dampers) are deleted based on analysis performed by Toledo Edison.

2. Steam Generator Drain Valves (MS4531, MS4532) and Steam Generator Drain Isolation Valves (MS603, MS611) were deleted due to the presence of a normally closed manual isolation valve in each line. This eliminates the concern of spurious valve operation causing a Steam Generator blowdown.

3. Reactor Coolant Pump Component Cooling Water (CCW) Outlet Isolation Valves (CC4100, CC4200, CC4300, CC4400) were deleted since CCW cooling to the seals is no longer accredited for safe shutdown.

4. The 4160V transfer switchgear (CD) was deleted since the installed spare Service Water Pump and spare Component Cooling Water Pump can be powered through this mechanical transfer device from upstream buses C1 or D1 which are both identified in the analysis.

5. The alternate feeds from DC MCCs to the essential DC distribution panels were deleted since the alternate supply fuses have been removed for channel separation reasons. Therefore, no credit was taken for these disconnected cables.

From	To	Cable
DC MCC1	D2P	1PD102A
DC MCC1	D2N	1PD133A
DC MCC2	D1P	2PD201A
DC MCC2	D1N	2PD232A

6. EF15 was deleted since it is not a separate MCC. The cables serve only Containment Air Cooler (CAC) C1-3 and the essential power entry was a duplicate of the CAC entry. The control circuits are in E15 and F15 for CAC C1-3 which acts as the power supply. EF15 has no automatic controls and is used for manual transfer to maintain train separation.

7. PIRC2A3, PIRC2A4, PIRC2B3 (RCS Coolant Pressure Indicator) and PTRC2A3, PTRC2A4 and PTRC2B3 (RCS Coolant Pressure Instrument) were deleted because they duplicate NNI entries.

8. C5761A, C5762A Log, C5762A Rel, C5792 Log, C5792 Rel, C5792A (SFRCS relay and logic panels) were deleted and replaced by new cabinet designations and descriptions consistent with a recent modification. The new cabinets were listed in the essential power system since the circuits from these cabinets serve various other systems, not just SFRCS.

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Attachment 1
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Davis Besse Unit 1

APPENDIX A

AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - AFWS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFORMANCE GOALS	REQUIRED FOR H/S, C/S	PRIORITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEM	ELEMENTARY WIRING DIAGR./SHT	NOTES
1	AF3860	AFWP 1 DISCH TO SG2	MOV	E	C105A6	C105A6	AS IS		3	H/S C/S	1	40078	• SB	E11E	1PB11405A	E448/14A, B	1
1	AF3870	AFWP 1 DISCH TO SG1	MOV	E	Open	Open	AS IS		3	H/S C/S	1	40078	SC	D11PA	1PD107A	E448/36	2
2	AF3871	AFWP 2 DISCH TO SG1	MOV	F	C105A6	C105A6	AS IS		3	H/S C/S	1	40078	• SB	F12A	2PB12401A	E448/14A, B	1
2	AF3872	AFWP 2 DISCH TO SG2	MOV	F	Open	Open	AS IS		3	H/S C/S	1	40078	SC	F12B	2PB12402A	E448/35	2
2	AF599	AFW TO SG2 ISO VLV	MOV	D2	Open	Open	AS IS		3	H/S C/S	1	40078	SC	F11A	2PB11158A	E448/04C, D	2
1	AF608	AFW TO SG1 ISO VLV	MOV	D2	Open	Open	AS IS		3	H/S C/S	1	40078	SC	E11E	1PB11508A	E448/04C, D	2
2	AF6451	AFWP 2 FLOW CTRL VLV	SOV	F	Open	Open/Close	FO		3	H/S C/S	1	40060		2C6451	2CLC6451	E734A/09	4
														BC3702	2CLC6451C	E448/24	4, 5
														C4625	2LLC64518	E734A/9	4
1	AF6452	AFWP 1 FLOW CTRL VLV	SOV	E	Open	Open/Close	FO		3	H/C C/S	1	40060		2C6452	1CLC64521	E734A/9	4
														C3645	1CLC64528	E734A/9	4
														BC3701	1CLV6451C	E448/24	4, 5
1/2	E183	ADFP SEAL WTR COOLERS	CLR	11	Functional	Functional	N/A	AFWS TRAIN 1&2	3	H/S C/S	3	40060		N/A	N/A	N/A	15
1/2	E184-1	ADFP SEAL WTR COOLERS	CLR	11	Functional	Functional	N/A	AFWS TRAIN 1&2	3	H/S C/S	3	40060		N/A	N/A	N/A	15
1/2	E184-2	ADFP SEAL WTR COOLERS	CLR	11	Functional	Functional	N/A	AFWS TRAIN 1&2	3	H/S C/S	3	40060		N/A	N/A	N/A	15
1	FM6459	ADFP FLOW CTRL VALVE	SOV	11	Open	Open/Close	FO		3	H/S C/S	3	40060		2C6459	1CLC6459C	E734A/10	14
														C3645	1LLC6459B	E734A/10	14
2	FM6460	ADFP FLOW CTRL VLV	SOV	11	Open	Open/Close	FO	AFWT TRAIN 1&2	3	H/S C/S	3	40060		2C6460	2CLC6460C	E734A/10	14
														C4625	2LLC64460	E734A/10	14
2	ICS038A	AFPT 2 GOV CTRL VLV	MOV	F	Open	Open/Close	AS IS		3	H/S C/S	1	40036		CDF12A1(DC)	2CAFPT02A	E458/11C	3
														CDF12A1(DC)	2CS208A	E458/11A, B	3
1	ICS038B	AFPT 1 GOV CTRL VLV	MOV	E	Open	Open/Close	AS IS		3	H/S C/S	1	40036		CDE12A1(DC)	1CAFPT01A	E458/11A, B	3
														CDE12A1(DC)	1CS207A	E458/11C	3
1	MS106	AFPT 1 MS IN ISO VLV	MOV	EE	C105A6	Open	AS IS		3	H/S C/S	1	40036		D1NR	1PD135A	E448/14A, B	6
1	MS106A	AFPT 1 MS IN X-CONN	MOV	EE	Open	Open/Close	AS IS	MS106	3	H/S C/S	1	40036	•	F12B	1PB12711A	E448/46A, B	7
2	MS107	AFPT 2 MS IN ISO VLV	MOV	EE	C105A6	Open	AS IS		3	H/S C/S	1	40036		F11A	2PB11124A	E448/04A, B	6
2	MS107A	AFPT 2 MS IN X-CONN	MOV	EE	Open	Open/Close	AS IS	MS107	3	H/S C/S	1	40036	•	F11B	2PB11488A	E448/46A	7
1	MS5809A	ADPT 1 STEAM ADMISS VLV	SOV	E	C105A6	Open	FO		3	H/S C/S	1	40036	SC	C5791	1CVS809AA	E448/71	8, 5
														C5792	1CVS809AA	E448/71	8
2	MS5809B	AFPT 2 STEAM ADMISS VLV	SOV	F	C105A6	Open	FO		3	H/S C/S	1	40036	SC	C5793	2CVS809BA	E448/71	8, 5
1	P14-1	TD AUX FW PUMP 1	PUMP	E	Off	On	Off		3	H/S C/S	1	40060		N/A	N/A	N/A	9
2	P14-2	TD AUX FW PUMP 2	PUMP	F	Off	On	Off		3	H/S C/S	1	40060		N/A	N/A	N/A	9
1/2	P241	MTR DRIVEN FEED PUMP	PUMP	11	Off	On	Off	AFWS TRAIN 1&2	3	H/S C/S	3	40060		03	8P40210H	E448/01G	10
1/2	P242-1	ADFP AUX LUBE OIL PUMP	PUMP	11	Off	On	Off	AFWS TRAIN 1&2	3	H/S C/S	3	40060		F71	8PB7514A	E448/25	11
1/2	P242-2	ADFP SHAFT DRIVN LO PUMP	PUMP	11	Functional	Functional	N/A	AFWS TRAIN 1&2	3	H/S C/S	3	40060		N/A	N/A	N/A	12
1/2	T31-1	COND STO TANK 1-1	TANK	11	Functional	Functional	N/A		3	H/S C/S	1	40036		N/A	N/A	N/A	13
1/2	T31-2	COND STO TANK 1-2	TANK	11	Functional	Functional	N/A		3	H/S C/S	1	40036		N/A	N/A	N/A	13

1 1 1

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

1 2

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - CACS

TRAIN	COMPONENT	DESCRIPTION	TYPE	NO. OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFORMANCE GOALS	REQUIRED FOR H/S C/S	PRIORITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRWG /SHT	NOTES
1	C1-1	CAC FAN 1	FAN	0	ON/OFF	ON	OFF		5	H/S C/S	1	4029E		E14	1PBE1401A	E58B/01A,B	17
2	C1-2	CAC FAN 2	FAN	0	ON/OFF	ON	OFF		5	H/S C/S	1	4029E		F14	2PBF1401A	E58B/01A,B	17
1/2	C1-3	CAC FAN 3	FAN	0	ON/OFF	ON	OFF	C1-1,C1-2	5	H/S C/S	1	4029E		EF15	3PBEF15A	E58B/02A,B	17
														E-15	1CBE1501C	E58B/02A,B	17
														F-15	2CBF1501C	E58B/02A,B	17
1	E37-1	CAC COIL 1	HX	0	ON/OFF	OK	AS IS		5		1	4029E		N/A	N/A	N/A	17
2	E37-2	CAC COIL 2	HX	0	ON/OFF	ON	AS IS		5		1	4029E		N/A	N/A	N/A	17
1/2	E37-3	CAC COIL 3	HX	0	ON/OFF	ON	AS IS	E37-1, E37-2	5		1	4029E		N/A	N/A	N/A	17

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN,2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL,2- REACTOR COOLANT(RCS), 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING,5-SUPPORT FUNCTIONS

Davis Besse Unit 1

APPENDIX A

SAFE SHUTDOWN COMPONENT LIST

AREA OPTIMIZATION

SYSTEM - CCWS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAM./SHT	NOTES
1/2	CC1407A	CCW OUT ISO VLV FROM CTMT	MOV	D	OPEN	OPEN	AS IS		5	H/S C/S	1	M036C	SC	E11B	1PBE1173A	E50B/09A,B	26
1/2	CC1407B	CCW OUT ISO VLV FROM CTMT	MOV	DJ	OPEN	OPEN	AS IS		5	H/S C/S	1	M036C	SC	F11B	2PBE1158A	E50B/10A,B	26
1	CC1409	CCW TO LETDOWN CLR 1 IN VLV	MOV	B	OPEN/CLOSE	OPEN/CLOSE	AS IS		5	H/S C/S	1	M036C	[SC]	F12A	2PBE1226A	E52B/17B	26
2	CC1410	CCW TO LETDOWN CLR 2 IN VLV	MOV	B	OPEN/CLOSE	OPEN/CLOSE	AS IS		5	H/S C/S	1	M036C	[SC]	F12A	2PBE1226A	E52B/17B	26
1/2	CC1411A	CCW INLET ISO VLV TO CTMT	MOV	B	OPEN	OPEN	AS IS		5	H/S C/S	1	M036C	SC	E11B	1PBE1176A	E50B/23A,B	26, 5
													SC	[RC3704]	1CR3757A	E50B/25	5, 26
1/2	CC1411B	CCW INLET ISO VLV TO CTMT	MOV	DJ	OPEN	OPEN	AS IS		5	H/S C/S	1	M036C	SC	F11B	2PBE1159A	E50B/24A,B	26, 5
													SC	[RC3705]	2CR3758A	E50B/25	5, 26
1/2	CC1460	CC TO AB PNP HDR IN VLV	SOV	T	OPEN/CLOSE	OPEN(AL)	FC	HPIS TRAIN 1&2	5	H/S C/S	1	M036A		C5717(AC)	2CV1460D	E50B/12A	25, 5
														C5755C(DC)	2CV1460E	E50B/12A	25, 5
1	CC1467	DHR CLR 1 OUT ISO VLV	SOV	AB	CLOSED	OPEN	FO		5	C/S	1	M036B		C5716(AC)	1CV1467C	E50B/11	18, 5
														C5763C(DC)	1CV1467E	E50B/11	18, 5
2	CC1469	DHR CLR 2 OUT ISO VLV	SOV	AB	CLOSED	OPEN	FO		5	C/S	1	M036B		C5716(AC)	2CV1469C	E50B/11	18, 5
														C5755C(DC)	2CV1469E	E50B/11	18, 5
1	CC1471	DC JKT CR HX 1 OUT VLV	SOV	K	OPEN/CLOSE	OPEN	FO		5	H/S C/S	1	M036B		C3615(DC)	1CV1471B	E50B/16	19
														C5715(AC)	1CV1471A	E50B/16	19
2	CC1474	DC JKT CR HX 2 OUT VLV	SOV	J	OPEN/CLOSE	OPEN	FO		5	H/S C/S	1	M036B		C3616(DC)	2CV1474B	E50B/16	19
														C5715(AC)	2CV1474A	E50B/15	19
1	CC1495	NON-ESSENTIAL IN FSOL (SEAL RETURN)	SOV	U	OPEN	CLOSE	FC		5	H/S C/S	1	M036A	B	C5717(AC)	1CV1495C	E50B/15A	20, 5
														C5762C(DC)	1CV1495E	E50B/15A	20, 5
1	CC2645	CC RETURN HDR 1 VLV	MOV	G	OPEN/CLOSE	OPEN/CLOSE	AS IS	HPIS TRAIN 1&2	5	H/S C/S	1	M036B		E11D	1PBE1161A	E50B/13A,B	21
														RC3607(DC)	[1CCCW001A]	E50B/28	21, 5
														RC3704(AC)	[1CR3757A]	E50B/25	21, 5
2	CC2649	CC RETURN HDR 2 VLV	MOV	G	OPEN/CLOSE	OPEN/CLOSE	AS IS	HPIS TRAIN 1&2	5	H/S C/S	1	M036B		E11D	2PBE1161A	E50B/13A,B	21
														RC3606(DC)	[2CCCW002A]	E50B/28	21, 5
														RC3705(AC)	[2CR3758A]	E50B/25	21, 5
1	CC5095	CC HDR 1 IN ISO VLV	MOV	T	OPEN/CLOSE	OPEN	AS IS		5	H/S C/S	1	M036A		F12A	1PBE1225A	E50B/13A,B	22
														RC3607(DC)	[1CCCW001A]	E50B/28	5, 22
														RC3704(AC)	[1CR3757A]	E50B/25	5, 22
2	CC5096	CC HDR 2 IN ISO VLV	MOV	T	OPEN/CLOSE	OPEN	AS IS		5	H/S C/S	1	M036A		F11A	2PBE1159A	E50B/13A,B	22
														RC3606(DC)	[2CCCW002A]	E50B/28	5, 22
														RC3705(AC)	[2CR3758A]	E50B/25	5, 22
1	CC5097	CCW LINE 1 RET ISO VLV	MOV	T	OPEN/CLOSE	OPEN/CLOSE	AS IS		5	H/S C/S	1	M036B		F12A	1PBE1227A	E50B/13A,B	27
														[RC3607 (DC)]	[1CCCW001A]	E50B/28	5, 27
														[RC3704 (AC)]	[1CR3757A]	E50B/25	5, 27
2	CC5098	CCW LINE 2 RET ISO VLV	MOV	T	OPEN/CLOSE	OPEN/CLOSE	AS IS		5	H/S C/S	1	M036B		F11A	2PBE1159A	E50B/13A,B	27
														[RC3606 (DC)]	[2CCCW002A]	E50B/28	5, 27
														[RC3705 (AC)]	[2CR3758A]	E50B/25	5, 27
1	E22-1	CCW HEAT EXCHANGER 1-1	HEX	F	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M036A		N/A	N/A	N/A	23
2	E22-2	CCW HEAT EXCHANGER 1-2	HEX	F	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M036A		N/A	N/A	N/A	23
1/2	E22-3	CCW HEAT EXCHANGER 1-3	HEX	F	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M036A		N/A	N/A	N/A	23
1	[FIS14237]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	ON		5	H/S C/S	1	M036A		D1P	1CD1P23A	E633B/23	30
2	[FIS14220]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	OFF		5	H/S C/S	1	M036A		D2P	2CD2P23A	E633B/23	30
1	[FIS14270]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	OFF		5	H/S C/S	1	M036A		D1P	1CD1P23A	E633B/23	30
2	[FIS14270]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	OFF		5	H/S C/S	1	M036A		D2P	2CD2P23A	E633B/23	30
1	[FIS14320]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	OFF		5	H/S C/S	1	M036A		D1P	1CD1P23A	E633B/23	30
2	[FIS14320]	FLOW SWITCH CCWS PUMP	FS	T	ON	ON	OFF		5	H/S C/S	1	M036A		D2P	2CD2P23A	E633B/23	30
1	P43-1	CCW PUMP 1	PUMP	T	ON/OFF	ON	OFF		5	H/S C/S	1	M036A		C1	1PAC113A	E50B/03D	24
														RC3607(DC)	[1CCCW001A]	E50B/28	5, 24
2	P43-2	CCW PUMP 2	PUMP	T	ON/OFF	ON	OFF		5	H/S C/S	1	M036A		D1	2PAD113A	E50B/03D	24
														RC3606(DC)	[2CCCW002A]	E50B/28	5, 24
1/2	P43-3	CCW PUMP 3	PUMP	T	ON/OFF	ON	OFF		5	H/S C/S	1	M036A		C1	1PAC108A	E50B/04A,C	24
														D1	2PAD108A	E50B/04A,C	24
														[C1]	1CAC03B	E50B/4C	24
														[D2P]	2CAC03B	E50B/04D	24
														[C1]	2PAC04A	E50B/04C	24
														[D1P]	1PD1P66A	E640A/1A	20
														[D1]	2CAD03B	E50B/4C	24
														[D2P]	2PD2P66A	E640A/2A	24
														[C1]	3PAC04A	E50B/4C	24
1/2	T-12	CCW SURGE TANK	TANK	EE	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M036A		N/A	N/A	N/A	23

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP/CMPONE-NT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT/MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - CFS

TRAIN	COMPONENT	DESCRIPTION	TYPE	NOR. OP COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR M/S C/S	PRIOR-ITY	FROM 1-LINE	HIGH/LOW SPECIFICS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT	NOTES
2	CF01A	CORE FLOOD TK 2 ISO VLV	MOV	C	OPEN	OPEN	AS IS		N/A	C/S	1	M034	R	CBF11A1(AC) T11A	2CVCF01AA 2PNF1120A	E528/27A E528/27	31 31
1	CF01B	CORE FLOOD TK 1 ISO VLV	MOV	C	OPEN	OPEN	AS IS		N/A	C/S	1	M034	R	CBF11B1(BC) E11B	1CVCF01BA 1PNE1162A	E528/27A E528/27	31 31

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN,2-BACKUP/REDUNDANT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL,2- REACTOR COOLANT/MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING,5-SUPPORT FUNCTIONS

DAVIS BESSE UNIT 1

APPENDIX A

AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - CREVS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAGRAM/SHT	NOTES
1	C21-1	CTRM EVS FAN 1	FAN	MH	OFF	ON	OFF		5	H/S C/S	1	M027A		E12A	1PBE1209A	E608/01	32
2	C21-2	CTRM EVS FAN 2	FAN	MH	OFF	ON	OFF		5	H/S C/S	1	M027A		F11A	2PBF1149A	E608/01	32
1	E106-1	CREVS COOLING COIL	H/EX	MH	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M027A		N/A	N/A	N/A	37
2	E106-2	CREVS COOLING COIL	H/EX	MH	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M027A		N/A	N/A	N/A	37
1	F22-1	CREVS FILTER BANK	FLT	MH	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M027A		N/A	N/A	N/A	38
2	F22-2	CREVS FILTER BANK	FLT	MH	FUNCTIONAL	FUNCTIONAL	N/A		5	H/S C/S	1	M027A		N/A	N/A	N/A	38
1	S33-1	CTRM EMERG A/C UNIT 1	A/C	MH	OFF	ON	OFF		5	H/S C/S	1	M027A		E12A	1PBE1216A	E801	33
														C6704	1CCEAC1C	E801	33
														C6714	1CPTS898A	E801	33
2	S33-2	CTRM EMERG A/C UNIT 2	A/C	MH	OFF	ON	OFF		5	H/S C/S	1	M027A		F11A	2PBF1137A	E801	33
														C6709	2CCEAC2E	E801	33
														C6715	2LPTS899A	E801	33
1	SV4823A	CREVS CONDENSER UNIT 1 (S33-1) IN	SOL	MH	CLOSED	OPEN	CLOSED		5		1	M027A		C6708	1CCEAC1G	E817/53A	34
2	SV4827A	CREVS CONDENSER UNIT 2 (S33-2) IN	SOL	MH	CLOSED	OPEN	CLOSED		5		1	M027A		C6709	2CCEAC2G	E817/54A	34

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - CSS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S, C/S	PRIOR-ITY	FED 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	PWR'D SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1	CS1530	CTMT SPRAY ISO VLV	MOV	DF	C[0]46	C[0]50	FS IS	PS6-1	N/A	H/S C/S	1	M03M	R 50	E11C	1RBE1156A	E528/21A,B	10
2	CS1531	CTMT SPRAY ISO VLV	MOV	D3	C[0]50	C[0]46	AS IS	PS6-2	N/A	H/S C/S	1	M03M	R 50	F11B	2RBE1147A	E528/21A,B	10
1	PS6-1	CS PUMP 1	PUMP	A5	OFF	OFF	OFF	CS1530	N/A	H/S C/S	2	M03M	R 55	F1	1RBE111A	E528/07A,B	10
2	PS6-2	CS PUMP 2	PUMP	4	OFF	OFF	OFF	CS1531	N/A	H/S C/S	2	M03M	R 55	F1	2RBE111A	E528/07A,B	10

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - DHRS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW, SPURIOUS, BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAGRAM	NOTES
2	DH51A	LPI LINE 2 VLV	MOV	DB	Open	Open	AS IS		2,3	C/S	1	M033B	SC	F11C	2PBF1136A	E52B/60B	42
1	DH51B	LPI LINE 1 VLV	MOV	DC	Open	Open	AS IS		2,3	C/S	1	M033B	SC	E11A	1PBE1106A	E52B/60B	42
2	DH67A	BWST ISO VLV A	MOV	AC	Open	Open	AS IS		2	H/S C/S	1	M033A	SC	E11B	2PBF1106A	E52B/19A,C	43
1	DH67B	BWST ISO VLV B	MOV	AC	Open	Open	AS IS		2	H/S C/S	1	M033A	SC	E11A	1PBE1157A	E52B/19A,C	43
2	DH99A	CTMT SUMP ISO VLV A	MOV	HA	Closed	Closed	AS IS		2	H/S C/S	1	M033C	B SD	F11C	2PBF1142A	E52B/19B,C	44
1	DH99B	CTMT SUMP ISO VLV B	MOV	12A	Closed	Closed	AS IS		2	H/S C/S	1	M033B	B SD	E11A	1PBE1112A	E52B/19B,C	44
2	DH11	DH NORM SUCT LINE VLV	MOV	D	Closed	Open/Closed	AS IS		2,3	C/S	1	M033B	H/L	CDF11A1(AC)	2CBF1130E	E52B/24A,B	45
														F11A	2PBF1130A	E52B/34A,B	45
1	DH12	DH NORM SUCT LINE VLV	MOV	D	Closed	Open/Closed	AS IS		2,3	C/S	1	M033B	H/L	CDE1182(AC)	1CBE1163H	E52B/24C,D	45
														E11B	1PBE1183A	E52B/24C,D	45
2	DH13A	DH CLR 2 BYPASS VLV	SDV	4b	Closed	Closed	FC		2	C/S	1	M033C	SD	C5717(AC)	2CVDH13AC	E52B/25B	48, 5
														C5755C(DC)	2CVDH13AB	E52B/25B	48, 5
1	DH13B	DH CLR 1 BYPASS VLV	SDV	AR	Closed	Closed	FC		2	C/S	1	M033B	SD	C5717(AC)	1CVDH13BE	E52B/25B	48, 5
														C5762C(DC)	1CVDH13BB	E52B/25B	48, 5
2	DH14A	DH CLR 2 OUT VLV	SDV	AB	Open	Open	FO		2,3	C/S	1	M033C	SC	C5717(AC)	2CVDH14AE	E52B/25B	49, 5
														C5755C(DC)	2CVDH14AB	E52B/25B	49, 5
1	DH13B	DH CLR 1 OUT VLV	SDV	AB	Open	Open	FO		2,3	C/S	1	M033B	SC	C5717(AC)	1CVDH14BE	E52B/25B	49, 5
														C5762C(DC)	1CVDH14BB	E52B/25B	49
1	DH1517	DH NORM SUCT LINE 1 VLV	MOV	DB	Closed	Open/Closed	AS IS		3	C/S	1	M033B		E11D	1PBE1126A	E52B/22	46
2	DH1518	DH NORM SUCT LINE 2 VLV	MOV	DB	Closed	Open/Closed	AS IS		3	C/S	1	M033C		F11C	2PBF1129A	E52B/22	46
1	DH2733	DH PUMP 1 BWST SUCT VLV	MOV	AB	Open	Open/Closed	AS IS		2,3	C/S	1	M033B		E11A	1PBE1121A	E52B/23B	47
2	DH2734	DH PUMP 2 BWST SUCT VLV	MOV	FP	Open	Open/Closed	AS IS		2	C/S	1	M033C		F11C	2PBF1136A	E52B/23B	47
1/2	DH2735	DH AUX SPRAY STOP VLV	MOV	D	Closed	Closed	AS IS		3	C/S	1	M033B	B SD	E11B	1CBE1155C	E52B/1	52
1/2	DH2736	DH AUX SPRAY THRTL VLV	MOV	DJ	Closed	Closed	AS IS		3	C/S	1	M033B	B SD	F11A	2CBF1125C	E52B/2B	52
2	DH63	LPI/HPI CROSS-TIE VLV	MOV	A	Closed	Closed	AS IS		2,3	C/S	1	M033B	SD	F11E	2PBF1195A	E52B/66	51
1	DH64	LPI/HPI CROSS-TIE VLV	MOV	AB	Closed	Closed	AS IS		2,3	C/S	1	M033B	SD	E11E	1PBE1187A	E52B/66	51
1	E27-1	DHRS COOLER 1-1	FAN	A5	Force Closed	Force Closed	N/A		3	C/S	1	M033B		N/A	N/A	N/A	54
2	E27-2	DHRS COOLER 1-2	FAN	AR	Force Closed	Force Closed	N/A		3	C/S	1	M033C		N/A	N/A	N/A	54
1	P42-1	DHR/LPI PUMP 1	PUMP	A5	Off	On/Off	OFF		2,3	C/S	1	M033B		C1	1PAC112A	E52B/66A,B	41
2	P42-2	DHR/LPI PUMP 2	PUMP	A	Off	On/Off	OFF		2,3	C/S	1	M033C		D1	2PAD112A	E52B/66C,D	41
1/2	T-10	BORATED WATER STORAGE TANK	TANK	05	Functional	Functional	N/A		2	H/S C/S	1	M033A		N/A	N/A	N/A	55

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

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DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - EDG

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	PRID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1	DA1147A/B	EDG 1 AIR START VLV	SOV	K	CLOSED	OPEN	FC		5	H/S C/S	1	M017B		C3615(DC)	1CGD104A	E64B/01F	59
2	DA1148A/B	EDG 2 AIR START VLV	SOV	J	CLOSED	OPEN	FC		5	H/S C/S	1	M017B		C3616(DC)	2CGD204A	E64B/02F	59
1	DA2987	AIR START RCVR 1-1-1 DISCH VLV	AOV	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
1	DA2988	AIR START RCVR 1-1-2 DISCH VLV	AOV	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
2	DA2989	AIR START RCVR 1-2-1 DISCH VLV	AOV	J	OPEN	OPEN	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
2	DA2990	AIR START RCVR 1-2-2 DISCH VLV	AOV	J	OPEN	OPEN	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
1	DA60	AIR START RCVR 1-1-1 RELAY VLV	AOV	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
1	DA61	AIR START RCVR 1-1-2 RELAY VLV	AOV	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
2	DA62	AIR START RCVR 1-2-1 RELAY VLV	AOV	J	OPEN	OPEN	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
2	DA63	AIR START RCVR 1-2-2 RELAY VLV	AOV	J	OPEN	OPEN	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	57
1	E10-1	EDG 1 JACKET WATER HEAT EXCH	H/EX	K	Functional	Functional	N/A		5	H/S C/S	1	M036B		N/A	N/A	N/A	60
2	E10-2	EDG 2 JACKET WATER HEAT EXCH	H/EX	J	Functional	Functional	N/A		5	H/S C/S	1	M036B		N/A	N/A	N/A	60
1	K5-1	EMERG DIESEL GENERATOR 1	EDG	K	ON/OFF	ON	OFF		5	H/S C/S	1	M017A		D1P	1CGD103A	E64B/01F	60
														F061-1	1CGD101C	E27	60
														D1N, D1P	1CGD102A	E64B/1C	60
														D1N, D1P	1CGD105A	E64B/1C	60
														D1N, D1P	1CGD106A	E64B/1C	60
														D1N, D1P	1CGD108C	E64B/13	60
														D1N, D1P	1CGD110A	E64B/15	60
2	K5-2	EMERG DIESEL GENERATOR 2	EDG	J	ON/OFF	ON	OFF		5	H/S C/S	1	M017A		D2P	2CGD203A	E064B/02F	60
														E001-2	2CGD201C	E27	60
														D2N, D2P	2CGD202A	E64B/2C	60
														D2N, D2P	2CGD205A	E64B/1H	60
														D2N, D2P	2CGD206A	E64B/1H	60
														D2N, D2P	2CGD208A	E64B/13	60
														D2N, D2P	2CGD210A	E64B/15	60
1	P148-1A	EDG JACKET WATER PUMP (RIGHT)	PUMP	K	ON/OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
1	P148-1B	EDG JACKET WATER PUMP (LEFT)	PUMP	K	ON/OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
2	P148-2A	EDG JACKET WATER PUMP (RIGHT)	PUMP	J	ON/OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
2	P148-2B	EDG JACKET WATER PUMP (LEFT)	PUMP	J	ON/OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
1	P150-1	EDG 1 PRESS PUMP	PUMP	K	OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
2	P150-2	EDG 2 PRESS PUMP	PUMP	J	OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
1	P195-1	EDG FUEL OIL TRANSFER PUMP 1	PUMP	BN	OFF	ON	OFF		5	C/S	1	M017A		E12F	1PME12SBA	E64B/10C	56
2	P195-2	EDG FUEL OIL TRANSFER PUMP 2	PUMP	BN	OFF	ON	OFF		5	C/S	1	M017A		E12A	2PME12SBA	E064B/10C	56
1	P201-1	EDG 1-1 A/D FUEL OIL PUMP	PUMP	K	ON/OFF	ON	OFF	P205-1	5	H/S C/S	1	M017A		C3621	N/A	N/A	58
1	P201-2	EDG 1-2 A/D FUEL OIL PUMP	PUMP	J	ON/OFF	ON	OFF	P205-2	5	H/S C/S	2	M017A		C3622	N/A	N/A	58
2	P205-1	EDG 1-1 E/D FUEL OIL PUMP	PUMP	K	ON/OFF	ON	OFF	P201-1	5	H/S C/S	1	M017A		C3621	N/A	N/A	58
2	P205-2	EDG 1-2 E/D FUEL OIL PUMP	PUMP	J	ON/OFF	ON	OFF	P201-2	5	H/S C/S	2	M017A		C3622	N/A	N/A	58
1	P264-1	EDG 1 SCAVGR PUMP	PUMP	K	OFF	ON	OFF		5	H/S C/S	1	N/A			N/A	N/A	68
2	P264-2	EDG 2 SCAVGR PUMP	PUMP	J	OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
1	P265-1	EDG 1 PISTON CLG PUMP	PUMP	K	OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
2	P265-2	EDG 2 PISTON CLG PUMP	PUMP	J	OFF	ON	OFF		5	H/S C/S	1	N/A		N/A	N/A	N/A	68
1	P8-1	DD XFER PUMP 1	PUMP	BM	ON/OFF	ON	OFF	P195-1	5	H/S C/S	3	M017C		E12B	XPME12S7A	E64B/10A	203
1	S206-01	EDG 1 AIR START MOTOR	MTR	K	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
1	S206-02	EDG 1 AIR START MOTOR	MTR	K	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
1	S206-03	EDG 1 AIR START MOTOR	MTR	K	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
1	S206-04	EDG 1 AIR START MOTOR	MTR	K	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
2	S207-01	EDG 2 AIR START MOTOR	MTR	J	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
2	S207-02	EDG 2 AIR START MOTOR	MTR	J	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
2	S207-03	EDG 2 AIR START MOTOR	MTR	J	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
2	S207-04	EDG 2 AIR START MOTOR	MTR	J	OFF	ON	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	64
1	T153-1	EDG FUEL OIL TANK 1-1	TANK	BN	Functional	Functional	N/A		5	C/S	1	M017A		N/A	N/A	N/A	62
2	T153-2	EDG FUEL OIL TANK 1-2	TANK	BN	Functional	Functional	N/A		5	C/S	1	M017A		N/A	N/A	N/A	62
1	T46-1	EDG DAY TANK 1-1	TANK	K	Functional	Functional	N/A		5	H/S C/S	1	M017A		N/A	N/A	N/A	61
2	T46-2	EDG DAY TANK 1-2	TANK	J	Functional	Functional	N/A		5	H/S C/S	1	M017A		N/A	N/A	N/A	61
1	T86-1	EDG STARTING AIR RECEIVER 1-1-1	TANK	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	63
1	T86-2	EDG STARTING AIR RECEIVER 1-1-2	TANK	K	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	63
2	T86-3	EDG STARTING AIR RECEIVER 1-2-1	TANK	J	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	63
2	T86-4	EDG STARTING AIR RECEIVER 1-2-2	TANK	J	Functional	Functional	N/A		5	H/S C/S	1	M017B		N/A	N/A	N/A	63

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1
2
1, 4
2

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

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Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - ESSPWR

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	PRID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1	1N	125VDC STATION BATTERY	BATT	Z	ON	ON	OFF		5	H/S C/S	1	E7		N/A	1PD131A	E007	87
1	1P	125VDC STATION BATTERY	BATT	Z	ON	ON	OFF		5	H/S C/S	1	E7		N/A	1PD104A	E007	87
2	2N	125VDC STATION BATTERY	BATT	W	ON	ON	OFF		5	H/S C/S	1	E7		N/A	2PD231A	E007	87
2	2P	125VDC STATION BATTERY	BATT	W	ON	ON	OFF		5	H/S C/S	1	E7		N/A	2PD204A	E007	87
1/2	BUS A	13.8 KV BUS A (BACKFEED)	SWGR	S	ON	ON	OFF	BACKFEED C2/D2	5		2	E1/1		XAC	APXAC01A	E21/1	205
1/2	BUS B	13.8 KV SWITCHGEAR (BREAKER H86D)	SWGR	Q	ON	ON	OFF	BACKFEED S2	5	H/S C/S	2	E1/1		DBP	BPDBP02A	E238	205
1	C1	4.16KV AC SWGR	SWGR	S	ON	ON	OFF		5	H/S C/S	1	E1/1		EDG 1-1	1PAC101A	E648/1A	70
														D1P	1PD1P05A	E640A/1A	70
														D1N	3PD1N05A	E640A/3A	70
														C1	1CABDC1C	E348/3	70
														C1	1CAC101D	E648/1A	70
														C1	1CAC1033A	E22/1	70
														C1	1CAC103A	E348/13	70
														D1P	1CGD103B	E648/1E	70
1	C2	4.16KV AC SWGR	SWGR	S	ON	ON	OFF	P3-1,-2,-3	5	H/S C/S	3	E1/1		C1	1PAL110A	E348/5	81
														D1	ACAACC2A	E348/1	81
														DAP	APDAP07A	E6425/1A	86
														DAN	APDAN07A	E6425/3A	86
														C1	ACAC2032A	E22/1	81
1	C3615	EDG1-1 PANEL LIGHTS (NORM PWR)	PNL	K	ON	ON	OFF		5	H/S-C/S	1	E7		V1	1PV105A	E508/16	80
														V3	3PV305A	E641A/3A	80
														D1P	1PD1P09A	E640A/1A	80
														D1N	3PD1N09A	E640A/3A	80
2	C3616	EDG1-2 PANEL LIGHTS (ALT PWR)	PNL	J	ON	ON	OFF		5	H/S-C/S	1	E7		V4	4PV405A	E641A/4A	80
														V2	2PV205A	E508/16	80
														D2N	4PD2N09A	E640A/4A	80
														D2P	2PD2P09A	E630A/2A	80
1	C3628	CONT POWER ESS METER HPI FLOW X	PNL	R	ON	ON	OFF		5	H/S C/S	1	E734A/5		V1	1CV108B	E641A/1A	162
2	C3629	CONT POWER ESS METER HPI FLOW Y	PNL	R	ON	ON	OFF		5	H/S C/S	1	E734A/5		V2	2CV208B	E641A/2A	162
1	C3630	CONT POWER TO AUX SD PANEL INST	PNL	R	ON	ON	OFF		5	H/S-C/S	1	E734A/4		V1	1CV108A	E641A/1A	150
														V2	2CV208A	E641A/2A	150
1	C3645	CONT POWER TO AUX FW CONTROL PNL	PNL	S	ON	ON	OFF		5	H/S-C/S	1	E734A/9		V1A (AC)	1CV104AA	E908A	1, 4
2	C4602	NEUTRON FLUX MON. CABINET (CH 2)	PNL	DF	ON	ON	OFF		5	H/S C/S	1	N/A		V2	2CV208AA	E1049/3	153
2	C4625	CONT POWER TO AUX FW CONTROL PANEL	PNL	X	ON	ON	OFF		5	H/S-C/S	1	E734A/9		V2A (AC)	2CV204AA	E909A	1, 4
1	C4808	NEUTRON FLUX MON. CABINET (CH 1)	PNL	DG	ON	ON	OFF		5	H/S C/S	1	N/A		V1	1CV108AA	E1049/1	153
1/2	C5705	CONT POWER (PORV IND LIGHTS)	PNL	FF	ON	ON	OFF		2	H/S C/S	1	N/A		V2 (AC)	2CV211A	E528/13	74.5
														V4	2CV419A	E641/4A	74.5
1	C5706	AC CONT PWR (SV6407 INDICATION)	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	E498/6B		VAU (AC)	ACVAU49A	E643A/2	74.5
														VBU (AC)	BCVBU28A	E643A/3	74.5,3
1	C5716	CONTROL ROOM SFAS PANEL	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V1	1CV112A	E641A/1A	198,5
1	C5717	CONT POWER SV IND LIGHTS	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E508/15A		V1	1CV116A	E641A/1A	73.5
														V2	2CV212A	E641A/2A	73.5
2	C5755C	SFAS POWERED SV CH 2	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E16/1		D2P	2CD2P19A	E640A/2A	198
2	C5755D	SFAS LOGIC ACTUATED CH 2	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E761		V2	2CV207A	E641A/2A	198
2	C5755E	CONTROL ROOM REACT PROT. SYS PNL (CH 2)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V2	2CV206A	E641A/2A	153
2	C5755G	POST ACCIDENT MON. RACK (CH 2)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V2A	2CV2A205A	E909A	153
2	C5756D	SFAS LOGIC ACTUATED CH2	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	E761		V4	4CV407A	E641A/4A	198
														D2P	2CD2P18A	E640A/2A	198
2	C5759B	CH B INST PWR ERCS LOOP 2 TEMP. PZR/PUL	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	E726A/6		C5760D	BONN1152A	E726A/7	154
2	C5759C	INST POWER NN1-X BUS	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	E7		VBU	BPVBU51A	E643A/4	153
														VAU	APVAU79A	E643A/1	153
2	C5760D	CONT POWER TO C5759B	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	E726A/7		VBU	BPVBU22A	E643A/3	154
														VBU	BPVBU22A	E643A/3	153
														VAU	APVAU26A	E643A/1	153
1/2	C5761A	CH 1 SFRCS XMTR & LOGIC	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E7		V1	1CV115B	E641A/1A	198
1	C5762A	CONTROL POWER TO SFRCS CH3 RELAY	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		D1P	1PD1P11A	E640A/1	198
														V1	1CV121A	E641A/1B	198
1	C5762C	SFAS POWERED SV CH 1	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E16/1		D1P	1CD1P18A	E640A/1A	198
1	C5762D	SFAS LOGIC ACTUATED CH 1	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E761		V1	1CV107A	E641A/1A	198
1	C5762E	CONTROL ROOM REACT PROT. SYS PNL (CH1)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V1	1CV106A	E641A/1A	153
1	C5763A	POST ACCIDENT MON. SYS PNL (CH1)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V1A	1CV1A105A	E908A	153
1	C5763D	SFAS POWERED SV CH 1	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E16/1		D1D	1CD1P19A	E640A/1A	198
														V3	3CV307A	E641A/3A	198
2	C5792	CONTROL ROOM SFRCS CABINET (CH2)	PNL	FF	ON	ON	OFF		5	H/S-C/S	1	N/A		D2P	2PD2P11A	E640A/2A	198

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

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DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - ESSPWR

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1/2	C5792A	CH 2 SFRCS XMTR & LOGIC	PNL	FF	ON	ON	OFF		5	H/S C/S	1	E7		V2	2CV2158	E641A/2A	198
														VF2	2CVF211A	E641A/2A	198
														V2	2CV2218	E641A/2B	198
2	C5798	POST ACCIDENT MON. IND. PNL (CH2)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V2A	2CV207AA	E909A	5,153
														V2A	2CV209AA	E909A	5,153
1	C5799	POST ACCIDENT MON. IND. PNL (CH1)	PNL	FF	ON	ON	OFF		5	H/S C/S	1	N/A		V1A	1CV107AA	E908A	5,153
														V1A	1CV109AA	E908A	5,153
1	C6708	CTRM EMERGENCY HVAC CONTROL PANEL	PNL	HH	ON	ON	OFF		5	H/S C/S	1	E801		V1	1CV1048	E641A/1A	201
2	C6709	CTRM EMERGENCY HVAC CONTROL PANEL	PNL	HH	ON	ON	OFF		5	H/S C/S	1	E801		V2	2CV2048	E641A/2A	201
1	C6714	CTRM EMERGENCY HVAC CONTROL PANEL	PNL	HH	ON	ON	OFF		5	H/S C/S	1	E801		C6708	1LV49068	E801	201
														V1	1CV1048	E641A/1A	201
2	C6715	CTRM EMERGENCY HVAC CONTROL PANEL	PNL	HH	ON	ON	OFF		5	H/S C/S	1	E801		V2	2CV2048	E641A/2A	201
														C6709	2LV49078	E801	201
1	CDE-118-1	CONTROL POWER (LOADS NON-SSD)	PNL	V	ON	OFF	ON		5	H/S C/S	1	E528/27		V1	1CV117C	E641A/1A	5
1	CDE-118-2	CONT POWER TO DH12 INTLK	PNL	V	ON	ON	OFF		5	H/S-C/S	1	E528/24D		V1	1CV1170	E641A/1A	5
1	CDE-12A-1	D1P CONT POWER TO AFWP GOV (HCS0368)	PNL	Y	ON	ON	OFF		5	H/S-C/S	1	E458/11C		D1P (DC)	1CD1P20C	E640A/1A	3
2	CDE-11A-1	CONTROL DISCONNECT TRANSFER SWITCH	PNL	DF	ON	ON	OFF		5	H/S C/S	1	N/A		V2	2CV214A	E641A/2A	70
2	CDF-12A-1	D2P CONT POWER TO AFWP GOV (HCS0368)	PNL	X	ON	ON	OFF		5	H/S-C/S	1	E458/11C		D2P (DC)	2CD2P20C	E640A/2A	3
2	D1	4.16KV AC SWGR	SWGR	Q	ON	ON	OFF		5	H/S C/S	1	E1/1		EDG 1-2	2PAD101A	E001/01	70
														D2P	2PD2P05A	E640A/2A	70
														D2N	4PD2N05A	E640A/4A	70
														D1	2CAACD1C	E348/9	70
														D1	2CAD1033A	E22/2	70
														D1	2CAD103A	E348/13	70
														D2P	2CD2D30	E648/2E	70
1	D1N	125VDC DIST PNL	ACC	BB	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 1	1PD132A	E007	70
1	D1NA	125VDC ACC	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 1	1PD145A	E007	70
1	D1P	125VDC DIST PNL	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 1	1PD101A	E007	70
1	D1PA	125VDC ACC	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 1	1PD126A	E007	70
2	D2	4.16KV SWGR	SWGR	Q	ON	ON	OFF	AFWS TRAIN 1&2	5	H/S C/S	3	E1/1		D1	2PAD110A	E001/01	82
														DAP/DAN	BCAB802A	E348/7	86A
														DBP	8PDBP07A	E642A/2A	86
														DBN	8PDBN07A	E642/4A	86
														D2N	BCAD2032B	E22/1	82
														C1	CABLE 86/S	E1/1	82
2	D2N	125VDC DIST PNL	ACC	AA	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 2	2PD233A	E007	70
														D2N	4PD2N05A	E640B/4A	70
														D2P	2CD2P10A	E640A/2	70
2	D2P	125VDC DIST PNL	ACC	X	ON	ON	OFF		5	H/S C/S	1	E7		DC ACC 2	2PD202A	E007	70
1	DAN	125VDC DIST PANEL	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		D1N	4PD1N04A	E640A/3A	70
1	DAP	125VDC DIST PANEL	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		D1N	4PD1N04A	E640A/1A	70
														D1P	4PD1P04A	E640A/1A	70
1	DBC1N	125VDC BATTERY CHARGER	BCHG	V	Functional	Functional	OFF		5	H/S C/S	1	E7		E12A	1PBE1235A	E007	88
1	DBC1P	125VDC BATTERY CHARGER	BCHG	V	Functional	Functional	OFF		5	H/S C/S	1	E7		E12A	1PBE1233A	E007	88
1	DBC1PN	125VDC BATTERY CHARGER	BCHG	V	Functional	Functional	OFF	DBC1P,DBC1N	5	H/S C/S	2	E7		E11D	1PBE1190A	E001	88
	DBC2N	125VDC BATTERY CHARGER	BCHG	X	Functional	Functional	OFF		5	H/S C/S	1	E7		E12A	2PBF1212A	E007	88
2	...?2P	125VDC BATTERY CHARGER	BCHG	X	Functional	Functional	OFF		5	H/S C/S	1	E7		E12A	2PBF1209A	E007	88
2	DBC2PN	125VDC BATTERY CHARGER	BCHG	X	Functional	Functional	OFF	DBC2P,DBC2N	5	H/S C/S	2	E7		E11D	2PBE1187A	E007	88
2	DBN	125VDC DIST PANEL	ACC	X	ON	ON	OFF		5	H/S C/S	1	E7		D2N	4PD2N04A	E640A/4A	70
2	DBP	125VDC DIST PANEL	ACC	X	ON	ON	OFF		5	H/S C/S	1	E7		D2P	4PD2P04A	E640A/2A	70
1	DC ACC 1	250/125V DC ACC	ACC	V	ON	ON	OFF		5	H/S C/S	1	E7		DBC1PN	1PD105A	E7	70
														DBC1PN	1PD121A	E7	70
														E12A	1PD103A	E7	70
														E12A	1PD134A	E7	70
2	DC ACC 2	250/125V DC ACC	ACC	X	ON	ON	OFF		5	H/S C/S	1	E7		DBC2PN	2PD205A	E7	70
														DBC2PN	2PD221A	E7	70
														F12A	2PD203A	E7	70
														E12A	2PD234A	E7	70
1	E1	480 VAC ACC E1	SWGR	Y	ON	ON	OFF		5	H/S C/S	1	E1/1		C1	1PAC11CEA	E1/1	70
														C1	1PAC12CEA	E1/1	70
														D1P	1PD1P07A	E640A/1A	70
														D1N	3PD1N07A	E640A/3A	70
														D1P	1CAC11CEE	E348/16	70
														D1P	1CAC12CEE	E348/16	70
														D1P	1PD1P07A	E640A/1A	70

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT/MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

Davis Besse Unit 1

APPENDIX A

AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - ESSPWR

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW, SPURIOUS, BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	EMERGENCY WIRING DIAG. / SHT.	NOTES
1	E1	480V AC MCC	SWGR	V	ON	ON	OFF		5	H/S C/S	1	E1/1		D1N	1PD1N07A	E640A/3A	70
														D1P	1CAC11CED	E348/16	70
														D1P	1CAC12CED	E348/16	70
														D1P	1CBCE11A	E378/3	70
														D1P	1CBCE12A	E378/3	70
1	E11A	480VAC MCC	MCC	G	ON	ON	OFF		5	H/S C/S	1	E6/1		E1	1PBE107A	E006/01	70
1	E11B	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/1		E11A	1PBE1120A	E006/01	70
1	E11C	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/1		E11A	1PBE1101A	E006/01	70
1	E11D	480VAC MCC	MCC	G	ON	ON	OFF		5	H/S C/S	1	E6/1		E11A	1PBE1132A	E006/01	70
1	E11E	480VAC MCC	MCC	DG	ON	ON	OFF		5	H/S C/S	1	E6/1		E11C	1PBE1150A	E006/01	70
1	E12A	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/1		E1	1PBE106A	E006/01	70
1	E12B	480VAC MCC	MCC	K	ON	ON	OFF		5	H/S C/S	1	E6/1		E12A	1PBE1224A	E006/01	70
1	E12C	480VAC MCC	MCC	BE	ON	ON	OFF		5	H/S C/S	1	E6/1		E12A	1PBE1202A	E006/01,05	70
1	E12D	480V AC MCC	MCC	BE	ON	ON	OFF		5	H/S C/S	1	E6/15		E12C	1PBE1201A	E6/5	202
1	E12E	480VAC MCC	MCC	B	ON	ON	OFF		5	H/S C/S	1	E6/1		E12A	1PBE1234A	E006/01	70
1	E12F	480VAC MCC	MCC	K	ON	ON	OFF		5	H/S C/S	1	E6/1		E12B	1PBE1273A	E006/01	70
1	E14	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/1		E1	1PBE110A	E006/01	70
1	E15	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/1		E1	1PBE105A	E006/01	70
1	E16A	480VAC MCC	MCC	EE	ON	ON	OFF		5	H/S C/S	1	E6/5		E1	1PBE118A	E006/05	71
														E1	1PBE115A	E378/4	70, 71
1	E16B	480VAC MCC	MCC	DC	ON	ON	OFF		5	H/S C/S	1	E6/5		E16A	1PBE1609A	E006/05	72
2	F1	480 V AC MCC F1	SWGR	X	ON	ON	OFF		5	H/S C/S	1	E1/1		D1	2PAD110FA	E1/2	70
														D1	2PAD120FA	E1/2	70
														D2P	2PD02P07A	E640A/2A	70
														D2N	4PD2N07A	2640A/4A	70
														D2P	2CAD110FE	E348/16	70
														D2P	2CAD120FE	E348/16	70
														D2P	2CBDE11A	E378/3	70
														D2P	2CBDF12A	E378/3	70
														D2N	2PD2N07A	E640A/4A	70
														D2P	2PD2P07A	E640A/2A	70
														D4P	2PD2P07A	E640A/2A	70
2	F11A	480VAC MCC	MCC	DF	ON	ON	OFF		5	H/S C/S	1	E6/2		F1	2PBF115A	E006/02	70
2	F11B	480VAC MCC	MCC	V	ON	ON	OFF		5	H/S C/S	1	E6/2		F11A	2PBF1137A	E006/02	70
2	F11C	480VAC MCC	MCC	DB	ON	ON	OFF		5	H/S C/S	1	E6/2		F11A	2PBF1143A	E006/02	70
2	F11D	480VAC MCC	MCC	G	ON	ON	OFF		5	H/S C/S	1	E6/2		F11A	2PBF1146A	E006/02	70
2	F11E	480VAC MCC	MCC	B	ON	ON	OFF		5	C/S	1	E6/2		F11A	2PBF1180A	E006/02	70
2	F12A	480VAC MCC	MCC	X	ON	ON	OFF		5	H/S C/S	1	E6/2		F1	2PBF114A	E006/02	70
2	F12B	480VAC MCC	MCC	J	ON	ON	OFF		5	H/S C/S	1	E6/2		F12A	2PBF1206A	E006/02	70
2	F12C	480VAC MCC	MCC	BF	ON	ON	OFF		5	H/S C/S	1	E6/2		F12A	2PBF1202A	E006/02	70
2	F12D	480VAC MCC	MCC	BF	ON	ON	OFF		5	H/S C/S	1	E6/2		F12C	2PBF1278A	E006/02,05	70
2	F14	480VAC MCC	MCC	X	ON	ON	OFF		5	H/S C/S	1	E6/2		F1	2PBF110A	E006/02	70
2	F15	480VAC MCC	MCC	X	ON	ON	OFF		5	H/S C/S	1	E6/2		F1	2PBF105A	E006/02	70
2	F16A	480V AC MCC	MCC	X	ON	ON	OFF		5	H/S C/S	1	E6/5		F1	2PBF118A	E378/4	70
1/2	F7	480V AC MCC F7	MCC	FF	ON	ON	OFF		5	H/S C/S	1	E1/1		D2	6PAD20F7A	E348/23	70
														D8N	8PD8N11A	E642A/4A	70
														D8P	8PD8P11A	E642A/2A	70
														F7	BCBF7A	E368/15	76
														D8N	BCBDE7A	E368/17	76
														D8P	BPD8P11A	E368/17	76
1/2	E21	480V AC MCC	MCC	FF	ON	ON	OFF		5	H/S C/S	1	E4/3		F7	2PBF707A	E36/18	70
1/2	RC1761	CONT POWER (RC1747)	PNL	A	ON	CS	OFF		5	H/S C/S	1	E16B/11		D8P	RCBDF40A	E642A/2B	151
														VBU	BCVBD01A	E643A/4	151
1	RC3601	DC CONT POWER RCP MONITOR	PNL	S	ON	ON	OFF		5	H/S-C/S	1	E528/49		D1P	1D1P21A	E640A/1B	198
2	RC3602	DC CONTROL POWER RCP MONITOR	PNL	Q	ON	ON	OFF		5	H/S-C/S	1	E528/49		D2P	2D2P21B	E640A/2B	198
1	RC3607	CONTROL POWER (TO CCCM001)	PNL	S	ON	ON	OFF		5	H/S-C/S	1	E508/28		D1P (DC)	1CD1P21D	E640A/1B	30.5
2	RC3608	CONTROL POWER (TO CCCM002)	PNL	Q	ON	ON	OFF		5	H/S-C/S	1	E508/28		D2P (DC)	2CD2P21C	E640A/2B	30.5
1	RC3701	DC CONTROL POWER TO AFG452	PNL	DJ	ON	ON	OFF		5	H/S-C/S	1	E448/24		D1P (DC)	1CD1P21A	E640A/1B	1.4.5
2	RC3702	DC CONTROL POWER TO AFG451	PNL	DJ	ON	ON	OFF		5	H/S-C/S	1	E448/24		D2P (DC)	2CD2P21A	E640A/2B	1.4.5
2	RC3705	CONT POWER RC3705 (UR3758)	PNL	DJ	ON	ON	OFF		5	H/S-C/S	1	E508/25		V2 (AC)	2CV216A	E641B/1A	5
1	RC3706	CONTROL POWER (LOADS NON-SSD)	PNL	V	ON	OFF	ON		5	H/S C/S	1	E528/71A		V1	1CV117B	E641B/1A	5
1/2	RC3715	CONT POWER (RC1453)	PNL	U	ON	ON	OFF		5	H/S C/S	1	E568/7		D4P	ACD4P28B	E642/1B	151
														D4P	ACD4P28A	E642A1B	151
1/2	RC3716	CONT POWER (PORV RC2)	PNL	U	ON	ON	OFF		2	H/S C/S	1	N/A		D8P (DC)	BCD8P30B	E528/13	171
2	RC4606	DC CONT PWR TO RC4606 (ALI3971, ALI6[illegible]	PNL	A	ON	ON	OFF		5	H/S-C/S	1	E498/70G		D2P (DC)	2PD2P12A	E640A/2A	138

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT

PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT/MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

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DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - ESSPWR

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	PNID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
2	RC4606	CONTROL POWER (RC2A - PORV)	PNL	X	ON	ON	OFF		5	H/S C/S	1	E7		D2N	2PD2N17A	E64B/4A	80
														D2P	2CD2P12A	E64A/4/24	5, 172
1	RC4601	DC CONT PWR TO RC4601 (RC6405, RC6406)	DC	V	ON	ON	OFF		5	H/S-C/S	1	E49B/70F		D1P (DC)	1PD1P12A	E64B4/1A	134
1	RC4602	CONT PWR (TO MUTK, SC (RN RLY)	PNL	V	ON	ON	OFF		5	H/S-C/S	1	E49B/70F		D4N	APD4N01A	E642A/3B	135
1/2	XAC01	BUS TIE XFMR BACKFEED	XFMR	05	ON	ON	OFF	BACKFEED C2/02	5	H/S C/S	2	E1/1		C2	CABLE #US	E22/1	70
1	XV1	CONSTANT VOLT TRANSFORMER (CVT CH 1)	XFMR	V	ON	ON	OFF		5	H/S C/S	1	E6/5		E16A	1PBE1616A	E7	90
2	XV2	CONSTANT VOLT TRANSFORMER (CVT CH 2)	XFMR	X	ON	ON	OFF		5	H/S C/S	1	E4/2		F16A	2PBF1624A	E7	90
1	XV3	CONSTANT VOLT TRANSFORMER (CVT CH 3)	XFMR	BB	ON	ON	OFF		5	H/S C/S	1	E6/5		E16B	1PBE1617A	E7	90
2	XV4	CONSTANT VOLT TRANSFORMER (CVT CH 4)	XFMR	AA	ON	ON	OFF		5	H/S C/S	1			F16A	2PBF1623A	E7	90
1	Y1	120VAC DIST PNL	PNL	V	ON	ON	OFF		5	H/S C/S	1	E7		D1P	1PD1P03A	E007	70
														XV1 (ALT)	1PXV1B	E7	90
1	Y1A	120 VAC ESS INSTR DISTR PANEL	PNL	V	ON	ON	OFF		5	H/S C/S	1	E7		YV1	1PVY1B	E7	70
														YV1	1PVY1B	E7	70
2	Y2	120VAC DIST PNL	PNL	X	ON	ON	OFF		5	H/S C/S	1	E7		D2P	2PD2P03A	E007	70
														XV2 (ALT)	2PXV2A	E7	90
														YV2	2PVY2A	E7	70
2	Y2A	120VAC DIST PNL	PNL	X	ON	ON	OFF		5	H/S C/S	1	E7		D2P	2PD2P03A	E007	70
														YV2	2PVY2B	E7	70
1	Y3	120VAC DIST PNL	PNL	BB	ON	ON	OFF		5	H/S C/S	1	E7		D1N	1PD1N03A	E007	83
														XV3 (ALT)	1PXV3A	E7	90
2	Y3B02	CONTROL POWER (4019 A #032)	PNL	11	ON	ON	OFF		5	H/S-C/S	1	E7		YM1	1PVM05A	E643A/3	137.5
2	Y4	120VAC DIST PNL	PNL	AA	ON	ON	OFF		5	H/S C/S	1	E7		D2N	4PD2N03A	E007	83
														XV4 (ALT)	4PXV4A	E7	90
														YV4	4PVY4A	E7	83
1	YAU	120VAC DIST PNL	PNL	V	ON	ON	OFF		5	H/S C/S	1	E7		DC #CC 1	APD116A	E007	84
														YV5	APVY05	E7	84
2	YBU	120VAC DIST PNL	PNL	X	ON	ON	OFF		5	H/S C/S	1	E7		DC #CC 2	BPD216A	E007	84
														YV6	BPVY06	E7	84
1	YE1	120VAC MCC	PNL	R	ON	ON	OFF		5	H/S C/S	1	E9		E12A	1PBE1258A	E009	70
1	YE2	240/120VAC MCC	PNL	V	ON	ON	OFF		5	H/S C/S	1	E9		E11B	1PBE1180A	E009	70
2	YF1	120VAC MCC	PNL	J	ON	ON	OFF		5	H/S C/S	1	E9		F12B	2PBF1270A	E009	70
2	YF2	240/120VAC MCC	PNL	DF	ON	ON	OFF		5	H/S C/S	1	E9		F11A	2PBF1101A	E009	70
1	YV1	125VDC INVERTER	INV	V	ON	ON	OFF		5	H/S C/S	1	E7		D1P	1PV1A	E007	90
2	YV2	125VDC INVERTER	INV	X	ON	ON	OFF		5	H/S C/S	1	E7		D2P	2PD2P03A	E007	90
														YV6	APVY6A	E7	90
1	YV3	125VDC INVERTER	INV	V	ON	ON	OFF		5	H/S C/S	1	E7		D1N	3PV13A	E007	90
2	YV4	125VDC INVERTER	INV	X	ON	ON	OFF		5	H/S C/S	1	E7		D2N	4PD2N03A	E007	90
1	YVA	125VDC INVERTER	INV	V	ON	ON	OFF		5	H/S C/S	1	E7		DC #CC 1	APD116A	E007	89
2	YVB	125VDC INVERTER	INV	X	ON	ON	OFF		5	H/S C/S	1	E7		DC #CC 2	BPD216A	E007	89
2	ZC6451	AFP #2 CTRL VLV POSITION CONTROLLER	PNL	F	ON	ON	OFF		5	H/S C/S	1	48D6D		D2P	2CD2P13A	E640A/2A	4
1	ZC6452	AFP #1 CTRL VLV POSITION CONTROLLER	PNL	E	ON	ON	OFF		5	H/S C/S	1	48D6D		D1P	1CD1P13A	E640A/1A	4
1	ZC6459	MDFP CONTROL VLV POSITION CONTROLLER	PNL	11	ON	ON	OFF		5	H/S C/S	1	E7		D1N	1CD1N16A	E641A/3A	14
2	ZC6460	MDFP CTRL VLV POSITION CONTROLLER	PNL	F	ON	ON	OFF		5	H/S C/S	1	48D6D		D2P	2CD2P16A	E640A/2A	14

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

Davis Besse Unit 1

APPENDIX A

SAFE SHUTDOWN COMPONENT LIST

AREA OPTIMIZATION

SYSTEM - HPIS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFORMANCE GOALS	REQUIRED FOR H/S C/S	PRIORITY	FED 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
2	HP02A	HPI 2 DISCH ISO VLV	MOV	DB	Closed	Open	AS IS	HP02B	1,2	H/S C/S	1	4D33A		E11C	2PBF1130A	6528/26A.8	
2	HP02B	HPI 2 DISCH ISO VLV	MOV	DB	Closed	Open	AS IS	HP02A	1,2	H/S C/S	1	4D33A		E11C	2PBF1140A	6528/26A.9	
1	HP02C	HPI 1 DISCH ISO VLV	MOV	DC	Closed	Open	As IS	HP02D	1,2	H/S C/S	1	4D33A		E11A	1PBE1103A	6528/26A.9	
1	HP02D	HPI 1 DISCH ISO VLV	MOV	DC	Closed	Open	AS IS	HP02C	1,2	H/S C/S	1	4D33A		E11A	1PBE1105A	6528/26A.8	
2	HP31	HPI PMP 2 RECIRC VLV	MOV	A	Open	Open	AS IS		1,2	H/S C/S	1	4D33A	SC	E11E	2PBF1104A	6528/65	
1	HP32	HPI PMP 1 RECIRC VLV	MOV	AB	Open	Open	AS IS		1,2	H/S C/S	1	4D33A	SC	E12E	1PBE1206A	6528/65	
1	P197-1	HPI PMP 1 AC LO PUMP	PUMP	AB	Off	On	OFF		1,2	H/S C/S	1	4D33A		E12E	1PBE1206A	6528/63	93
1	P197-2	HPI PMP 1 DC LO PMP	PUMP	AB	Off	On	OFF	P197-1	1,2	H/S C/S	2	4D33A		DC ACC 1	1PD105A	6528/64	94
2	P198-1	HPI PMP 2 AC LO PMP	PUMP	A	Off	On	OFF		1,2	H/S C/S	1	4D33A		F12A	2PBF1231A	6528/63	93
2	P198-2	HPI PMP 2 DC LO PUMP	PUMP	A	Off	On	OFF	P198-1	1,2	H/S C/S	2	4D33A		DC ACC 2	2PD206A	6528/64	94
1	P58-1	HPI PUMP 1	PUMP	AB	Off	On/Off	OFF		1,2	H/S C/S	1	4D33A		C1	1PAC151A	6528/05A	92
2	P58-2	HPI PUMP 2	PUMP	A	Off	On/Off	OFF		1,2	H/S C/S	1	4D33A		D1	2PAD111A	6528/05C	92

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUPCOMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANTMAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

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DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - HVAC

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	CONTROLLED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR W/S C/S	PRIOR-ITY	PRID 1-LINE	HIGH/LOW SPUR/HOUS. BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1	C100	TRAV SCR AREA EXH FAN EB/U SP PUMP	FAN	BD	ON/OFF	ON/OFF	ON		5	W/S C/S	3	M0268		E12D	1PNE1203A	E60B/51	118
2	C133	LV SWGR RM VENT FAN 2	FAN	EE	ON/OFF	ON	OFF		5	W/S C/S	1	M0279		E12A	2PNE1204A	E60B/048	100
1	C25-1	EDG RM 1 VENT FAN 1	FAN	K	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	1PVE1255A	E60B/02	98
1	C25-2	EDG RM 1 VENT FAN 2	FAN	K	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	1PNE1255A	E60B/02	98
2	C25-3	EDG RM 2 VENT FAN 3	FAN	J	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	2PNE1255A	E60B/02	98
2	C25-4	EDG RM 2 VENT FAN 4	FAN	J	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	2PNE1256A	E60B/02	98
1	C71-1	LV SWGR RM VENT FAN 1	FAN	V	ON/OFF	ON	OFF		5	W/S C/S	1	M0279		E12A	1PNE1217A	E60B/48	100
-	C73-1	AFP RM VENT FAN 1	FAN	E	ON/OFF	ON	OFF		5	W/S C/S	1	M0264		E12A	1PNE1222A	E60B/09	101
2	C73-2	AFP RM VENT FAN 2	FAN	F	ON/OFF	ON	OFF		5	W/S C/S	1	M0264		E12A	2PNE1205A	E60B/09	101
1	C78-1	BATT RM VENT FAN 1	FAN	Z	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	1PNE1285A	E60B/22	103
2	C78-2	BATT RM VENT FAN 2	FAN	W	ON/OFF	ON	OFF		5	W/S C/S	1	M0278		E12B	2PNE1259A	E60B/22	103
1	C99-1	SP PMP RA EXH FAN 1	FAN	BF	ON/OFF	ON	OFF		5	W/S C/S	1	M0268		E12C	1PNE1212A	E60B/50	105
1	C99-2	SP PMP RM EXH FAN 2	FAN	BE	ON/OFF	ON	OFF		5	W/S C/S	1	M0268		E12C	1PNE1205A	E60B/50A	105
2	C99-3	SP PMP RM EXH FAN 3	FAN	BF	ON/OFF	ON	OFF		5	W/S C/S	1	M0268		E12D	2PNE1211A	E60B/50	105
2	C99-4	SP PMP RM EXH FAN 4	FAN	BF	ON/OFF	ON	OFF		5	W/S C/S	1	M0268		E12D	2PNE1236A	E60B/50A	105
1	HV5531A	AIR IN LVR FOR B/U SP PUMP	DMPR	BD	OPEN/CLOSE	OPEN/CLOSE	OPEN		5	W/S C/S	3	M0268		E12D	ACMV5531A	E60B/52	118.5
1	HV5532A	AIR IN LVR FOR B/U SP PUMP	DMPR	BD	OPEN/CLOSE	OPEN/CLOSE	OPEN		5	W/S C/S	3	M0268		E12D	ACMV5531B	E60B/52	118.5
1	HV5305	LV SWGR RM FAN 1 DAMPER	DMPR	V	Open/Close	Open	AS IS		5	W/S C/S	1	M0279		VE1	1PVE104A	E60B/04C	106
1	HV5305A	LV SWGR RM 429 DAMPER	DMPR	V	Open/Close	Open	AS IS	HV5305B	5	W/S C/S	1	M0279		E12A	1PNE1240A	E60B/25	106
1	HV5305B	LV SWGR RM 429 DAMPER	DMPR	V	Open/Close	Open	AS IS	HV5305A	5	W/S C/S	1	M0279		E12A	1PNE1241A	E60B/25	106
2	HV5314	LV SWGR RM FAN 2 DAMPER	DMPR	EE	Open/Close	Open	AS IS		5	W/S C/S	1	M0279		VE1	2PVE104A	E60B/04C	107
2	HV5314A	LV SWGR RM 428 DAMPER	DMPR	X	Open/Close	Open	AS IS		5	W/S C/S	1	M0278		E12A	2PNE1239A	E60B/26	107
1	HV5329A	EDG RM 1 DAMPER	DMPR	K	Open/Close	Open	FC		5	W/S C/S	1	M0278		VE1	1PVE101A	E60B/18A	110
														C3615	1LGD109R	E64B/5	110
														C3615	1LGD109R	E64B/5	110
1	HV5329B	EDG RM 1 DAMPER	DMPR	K	Open/Close	Open	FC		5	W/S C/S	1	M0278		VE1	1PVE102A	E60B/18A	110
														C3615	1LGD109C	E64B/5	110
														C3615	1LGD109C	E64B/5	110
1	HV5329C	EDG RM 1 DAMPER	DMPR	K	Open/Close	Open	FC		5	W/S C/S	1	M0278		VE1	1PVE103A	E60B/18A	110
														C3615	1LGD109D	E64B/5	110
														C3615	1LGD109D	E64B/5	110
2	HV5336A	EDG RM 2 DAMPER	DMPR	J	Open/Close	Open	FC		5	W/S C/S	1	M0278		VE1	2PVE101A	E60B/18A	111
														C3616	2LGD209A	E64B/5	111
														C3616	2LGD209B	E64B/5	111
2	HV5336B	EDG RM 2 DAMPER	DMPR	J	Open/Close	Open	FC		5	W/S C/S	1	M0278		VE1	2PVE102A	E60B/18A	111
														C3616	2LGD209C	E64B/5	111
														C3616	2LGD209C	E64B/5	111
2	HV5336C	EDG ROOM 2 DAMPER	DMPR	J	OPEN/CLOSE	OPEN	FC		5	W/S C/S	1	M0278		C3616	2LGD209D	E64B/5	111
														C3616	2LGD209D	E64B/5	111
1	HV5597	BATT RM 429B ATM DMPR	DMPR	Z	Open/Close	Open	AS IS		5	W/S C/S	1	M0279		E12A	1PNE1208A	E60B/32	115
2	HV5598	BATT RM 428A ATM DMPR	DMPR	W	Open/Close	Open	AS IS		5	W/S C/S	1	M0279		E12A	2PNE1210A	E60B/32	115

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

Davis Besse Unit 1

APPENDIX A

SAFE SHUTDOWN COMPONENT LIST

AREA OPTIMIZATION

SYSTEM - MSS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFORMANCE GOALS	REQUIRED FOR M/S C/S	PRIORITY	PNID T-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEM	ELEMENTARY WIRING DIAGR./SHT	NOTES
2	ICS114	MSL 2 ATM VENT VLV	SOV	DH	Closed	Open/Closed	FC		3	M/S C/S	1	M007A		C5708(AC)	2CVCS114C	E46B/79A,B	124
														C5702(DC)	2CVCS114E	E46B/79A,B	124
1	ICS116	MSL 1 ATM VENT VLV	SOV	DH	Closed	Open/Closed	FC		3	M/S C/S	1	M007A		C5708(AC)	1CVCS116C	E46B/78A,B	124
														C5702A(DC)	1CVCS116E	E46B/78A,B	124
2	MS100	MSL 2 ISO VLV (SV1008)	SOV	DH	Open	Closed	FC		3	M/S C/S	1	M003A		C5702	2CFV1008C	E46B/16	120
														C5702A	1CFV1008H	E46B/17	120
														C5702	2CFV1008K	E46B/16	120
														C5706	2CFV1008	E46B/18	120
														C5702A	1CFV1008H	E46B/16	120
														C5702A	1CFV1008E	E46B/16	120
														C5702A	1CFV1008H	E46B/16	120
														C5702	2CRSCC12A	SF0038/10	120
														C5702	2CRSCC14A	SF0038/10	120
2	MS100-1	MSIV 2 MU ISO VLV	SOV	DH	Closed	Closed	FC		3	M/S C/S	1	M003A	SD	C5708(AC)	2CV1001C	E46B/32A,B	121
														C5702(DC)	2CV1001F	E46B/32A,B	121
														C5702	2CRSCC12A	SF0038/12	121
														C5702	2CRSCC14A	SF0038/12	121
1	MS101	MSL 1 ISO VLV (INDICATING LIGHT)	SOV	DH	Open	Closed	FC		3	M/S C/S	1	M003A		C5706	1CFV1018	E46B/18	120
														C5702A	1CFV1018C	E46B/18A	120
														C5702A	1CFV1018E	E46B/16	120
														C5702	2CFV1018H	E46B/16	120
														C5702	2CFV1018K	E46B/16	120
														C5702	2CFV1018H	E46B/16	120
														C5702A	1CRSCC11A	SF0038/9	120
														C5702A	1CRSCC13A	SF0038/9	120
1	MS101-1	MSIV 1 MU ISO VLV	SOV	DH	Closed	Closed	FC		3	M/S C/S	1	M003A	SD	C5708(AC)	1CV1011C	E46B/32A,B	121
														C5702A(DC)	1CV1011F	E46B/32A,B	121
														C5702A	1CRSCC11A	SF0038/11	121
2	MS105	MSL 2 MU DRAIN ISOLATION VALVES	SOV	DH	Closed	Closed	FC		3	M/S C/S	1	M003A	SD	C5702	1CRSCC13A	SF0038/11	121
														C5702A	2CRSCC12A	SF0038/16	122
														C5702A	2CRSCC14A	SF0038/16	122
1	MS204	MSL 1 MU DRAIN ISOLATION VALVES	SOV	DH	Closed	Closed	FC		3	M/S C/S	1	M003A	SD	C5706	2CV375A	E46B/3	122
														C5761A	1CRSCC11A	SF0038/17	123
														C5762A	1CRSCC13A	SF0038/17	123
2		PSV-SP17A1 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		C5706	1CV304A	E46B/3	122
2		PSV-SP17A2 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A3 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A4 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A5 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A6 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A7 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A8 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
2		PSV-SP17A9 MSL 2 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS118	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B1 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B2 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS114	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B3 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B4 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS114	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B5 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B6 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B7 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS116	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B8 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS114	3	M/S C/S	2	M007A		N/A	N/A	N/A	107
1		PSV-SP17B9 MSL 1 SAFETY VALVE	SV	DH	CLOSED	CLOSE/OPEN	FC	ICS114	3	M/S C/S	2	M007A		N/A	N/A	N/A	107

POTENCY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

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DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - MUPS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFORMANCE GOALS	REQUIRED F/O M/S C/S	PRIORITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW / DIAG	NOTES
1	E25-1	LETDOWN COOLER 1-1	CLR	D	FUNCTIONAL	FUNCTIONAL	N/A		2	M/S C/S	1	M031A		N/A	N/A	N/A	144
2	E25-2	LETDOWN COOLER 1-2	CLR	D	FUNCTIONAL	FUNCTIONAL	N/A		2	M/S C/S	1	M031A		N/A	N/A	N/A	146
1	E36-1	RCP SEAL COOLER 1	CLR	DC	FUNCTIONAL	FUNCTIONAL	N/A		2	M/S C/S	1	M031B		N/A		N/A	142
2	E36-2	RCP SEAL COOLER 2	CLR	DC	FUNCTIONAL	FUNCTIONAL	N/A		2	M/S C/S	1	M031B		N/A		N/A	142
1/2	F-35	PURIFICATION DEMIN FILTER 1-1	FLT	G	FUNCTIONAL	FUNCTIONAL	N/A		1,2	M/S C/S	1	M031A		N/A	N/A	N/A	146
1/2	F59-1	SEAL INJECT FLT 1-1	FLT	V	FUNCTIONAL	FUNCTIONAL	N/A		5	M/S C/S	1	M031B		N/A	N/A	N/A	138
1/2	F59-2	SEAL INJECT FLT 1-2	FLT	V	FUNCTIONAL	FUNCTIONAL	N/A		5	M/S C/S	1	M031B		N/A	N/A	N/A	138
1/2	HP1556	MU RECIRC TO BWST	MAN	AB	Closed	Open	AS IS	HPI TRAIN 1&2	1,2	M/S C/S	1	M033A		N/A	N/A	N/A	97
1	HP26	HPI TO RCP SEALS	MAN	AB	Closed	Open	AS IS		5	M/S C/S	1	M033A		N/A	N/A	N/A	149
2	HP27	HPI TO RCP SEALS	MAN	A	Closed	Open	AS IS		5	M/S C/S	1	M033A		N/A	N/A	N/A	149
1/2	HP29	MU RECIRC TO BWST	MAN	AB	Closed	Open	AS IS	HPI TRAIN 1&2	5	M/S C/S	1	M033A		N/A	N/A	N/A	134
1/2	MU01A	LETDOWN CLR 1 IN VLV	MOV	D	Open/Close	Open/Close	AS IS	MU65B,D1,B061	1,2	M/S C/S	1	M031A	H/L	F12A	2PBE1237A	E528/17A	143
1/2	MU01B	LETDOWN CLR 2 IN VLV	MOV	D	Open/Close	Open/Close	AS IS	MU65B,D1,B061	1,2	M/S C/S	1	M031A	H/L	F12A	2PBE1238A	E528/17A	143
1/2	MU02A	LETDOWN CLR OUT VLV	MOV	D	Open	Open/Close	AS IS		1,2	M/S C/S	1	M033A	H/L	E11B	1PBE1171A	E498/16	143
1/2	MU02B	LETDOWN CLR IN VLV	MOV	D	Open	Open/Close	AS IS		1,2	M/S C/S	1	M031A	H/L	E11B	1PBE1172A	E498/50A,B	143
1/2	MU03	RC LETDOWN ISO VLV	SOV	DC	Open	Open/Close	FC		1,2	M/S C/S	1	M031A	H/L	C5717(AC)	2CVM03C	E498/22A	143
														C5756D(DC)	2CVM03E	E498/22A	143
														C5755C	2CSF1744A	E498/22C	5, 141
														C5717	2CVM03C	E498/22A	5, 141
1/2	MU04	LETDOWN PRESS REDUCING VLV	MOV	DC	Open	Open	AS IS		1,2	M/S C/S	1	M031A		E22B	4PBE2259A	E498/17A,B	145
1/2	MU40A	PURIFICATION DEMIN 1-1 IN VALVE	MOV	J	Open/Close	Open	AS IS	MU40A	1,2	M/S C/S	1	M031A		E22B	4PBE2262A	E498/17A,B	147
1/2	MU40B	PURIFICATION DEMIN 1-2 IN VALVE	MOV	J	Open/Close	Open	AS IS	MU40A	1,2	M/S C/S	2	M031A		E22B	4PBE2263A	E498/17A,B	147
1/2	MU11	RC LETDOWN DIVERTING VLV	MOV	J	Open	Closed	AS IS		1,2	M/S C/S	1	M031A		E23B	4PBE2278A	E498/35A,B	148
														RC2825(AC)	4PBE2278D	E498/35A,B	148
1/2	MU182	SEAL RETURN TO MAKE UP TANK ISO VLV	MAN	I	OPEN	CLOSED	N/A		2	M/S C/S	1	M031C		N/A	N/A	N/A	140
1/2	MU19	SEAL INJ INLET ISO VLV	SOV	DE	Open	Open	FO		5	M/S C/S	1	M031C	SC	C5759C	REMN12610	E727A/B	137
														C5759C	REMN12648	E727A/11	137
														V3602(AC)	RCV36218A	E506A/2	137
1/2	MU190J	PURIFICATION DEMIN 1-3 IN VALVE	MOV	J	Open/Close	Open	AS IS	MU40A	1,2	M/S C/S	2	M031A		E22B	4PBE2271A	E498/17A,B	147
1/2	MU26B	HPI TO RCP SEALS	MAN	AB	Closed	Open	AS IS		5	M/S C/S	1	M033C		N/A	N/A	N/A	134
2	MU32	RC MU ISO VLV	PCV	HA	Open/Close	Open	FO	HPIS TRAIN 1&2	1,2	M/S C/S	1	M034C		V3602	RCV36217A	E632B/23	132
														C5763F	BLCOF532A	E724	5, 132
														C5759K	REMN12640	E727A/11	5, 132
1/2	MU36	RCP SEAL RETURN ISO VLV	SOV	DC	Open/Close	Open/Close	FC		1,2	M/S C/S	1	M031B	R	C5717(AC)	2CVM03BC	E498/19A-C	141
														C5756E(DC)	2CVM03BE	E498/19A-C	141
														C5756D (DC)	2CSF1747A	E498/19A-C	141
2	MU39?1	RC MU PUMP SUCT VLV	MOV	HA	Closed	Open/CIPSP	AS IS	HPIS TRAIN 2	1,3	M/S C/S	1	M031C		F16A	2PBE1617D	E498/70C,D	135
														RC4802	RCM11DM4B	E498/70E	135
														RC4606	RCM11DM2G	E498/70G	135
1/2	MU59A	RCP 2-1 SEAL RETURN VALVE	MOV	D	Open	Open	AS IS		5	M/S C/S	1	M031B	SC	E11B	1PBE1174A	E528/30A,B	140
1/2	MU59B	RCP 2-2 SEAL RETURN VALVE	MOV	D	Open	Open	AS IS		5	M/S C/S	1	M031B	SC	E11B	1PBE1175A	E528/30A,B	140
1/2	MU59C	RCP 1-1 SEAL RETURN VALVE	MOV	D	Open	Open	AS IS		5	M/S C/S	1	M031B	SC	E11B	1PBE1177A	E528/30A,B	140
1/2	MU59D	RCP 1-2 SEAL RETURN VALVE	MOV	D	Open	Open	AS IS		5	M/S C/S	1	M031B	SC	E11B	1PBE1178A	E528/30A,B	140
1	MU64D1	RC MU PUMP SUCT VLV	MOV	HA	Closed	Open/Close	AS IS	HPIS TRAIN 1	1,2	M/S C/S	1	M031C		E11D	1PBE1127D	E498/78A,B	135
														RC4802	RCM11DM4B	E498/70E	135
2	MU64D6	MU RECIRC ISO VLV	SOV	HA	Open	Open/Close	FO	HPIS TRAIN 2	1,2	M/S C/S	1	M031C		RC4606(DC)	2CVM04D	E498/69	134
1	MU64D7	MU RECIRC ISO VLV	SOV	HA	Open	Open/Close	FO	HPIS TRAIN 1	1,2	M/S C/S	1	M031C		RC4801(DC)	1CV64D7B	E498/68	134
2	MU64D8	MU CROSS CONNECT ISO VLV	MOV	HA	Open	Open	AS IS	HPIS TRAIN 2	1,2	M/S C/S	-	M031C	SC	F12A	2PBE1206F	E498/63A,B	133
1	MU64D9	MU CROSS CONNECT ISO VLV	MOV	HA	Open	Open	AS IS	HPIS TRAIN 1	1,2	M/S C/S	-	M031C	SC	E11D	1PBE1147F	E498/64A,B	133
1	MU64I9	MU DISCH VLV	MOV	DC	Closed	Open	AS IS	HPIS TRAIN 1	1,2	M/S C/S		M031C		E12E	1PBE1295F	E498/62A,B	132
2	MU64J0	MU32 BYPASS VLV	MOV	HA	Closed	Open	AS IS	HPIS MU32	1,2	M/S C/S	2	M031C		F16A	2PBE1616F	E498/65A,B	132
1	MU64J1	MU CTMT ISO VLV	MOV	DC	Closed	Open	AT IS	HPIS TRAIN 1	1,2	M/S C/S	1	M031C		E11D	1PBE1194F	E498/67A,B	131
2	MU64J2	MU CTMT ISO VLV	MOV	DB	Open	Open	AS IS	HPIS TRAIN 2	1,2	M/S C/S	1	M031C	SC	E11A	2PBE1108E	E498/66A,B	131
1/2	MU66A	RCP 2-1 SEAL INJ ISO VLV	AOV	EC	Open	Open	FC		5	M/S C/S	1	M031B	SC	C5717(AC)	2CVM06AA	E528/18A	139
														C5717(DC)	2CSF1748A	E528/61	139
														C5756D(DC)	2CVM06AA	E528/18A	139
1/2	MU66B	RCP 2-2 SEAL INJ ISO VLV	AOV	DC	Open	Open	FC		5	M/S C/S	1	M031B	SC	C5717(AC)	1CVM06BA	E528/18A	139
														C5717(DC)	1CSF1736A	E528/61	139
														C5763C(DC)	1CVM06BA	E528/18A	139
1/2	MU66C	RCP 1-1 SEAL INJ ISO VLV	AOV	DC	Open	Open	FC		1	M/S C/S	1	M031B	SC	C5717(AC)	1CVM06CA	E528/18A	139
														C5717(DC)	1CSF1737A	E528/61	139
														C5763C(DC)	1CVM06CA	E528/18A	139
1/2	MU66D	RCP 1-2 SEAL INJ ISO VLV	AOV	DC	Open	Open	FC		5	M/S C/S	1	M031B	SC	C5717(AC)	2CVM06DA	E528/18A	139
														C5717(DC)	2CSF1749A	E528/61	139

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT/MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - MUPS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	PRIM 1-LINE	ALTERN SHUTDOWN PROVISION	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAGM / SHT	NOTES
1/2	MU66D	RCP 1-2 SEAL INJ ISO VLV	ADV	DC	Open	Open	FC		5	H/S C/S	1	M0318	SC	C5756C(DC)	2CVMU66DA	ES28U/18A	130
1/2	MU89	SEAL RETURN TO CLEAN WASTE TK ISO VLV	MAN	I	CLOSED	OPEN	N/A		2	H/S C/S	1	M031A		N/A	N/A	N/A	149
1	P-371B	MUP 1 MAIN LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 1	1,2	H/S C/S	1	NONE		E11D	APME1191A	E49B/04	126
1	P-371C	MUP 1 AUX LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS,P-3718	1,2	H/S C/S	2	NONE		DC MCC 1	APD117A	E49B/24	129
1	P-371D	MUP 1 AUX GEAR LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 1	1,2	H/S C/S	1	NONE		E11D	APME1192A	E49B/25	130
2	P-372B	MUP 2 MAIN LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 2	1,2	H/S C/S	1	NONE		F11C	BPME1167A	E49B/04	128
2	P-372C	MUP 2 AUX LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS,P-3728	1,2	H/S C/S	2	NONE		DC MCC 2	BPD117A	E49B/24	129
2	P-372D	MUP 2 AUX GEAR LO PUMP	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 2	1,2	H/S C/S	1	NONE		F11C	BPME1168A	E49B/25	130
1	P37-1	MU PUMP 1	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 1	1,2	H/S C/S	1	M031C		C1	APWC105A	E49B/01A	127
2	P37-2	MU PUMP 2	PUMP	MA	On/Off	On	OFF	MPIS TRAIN 2	1,2	H/S C/S	1	M031C		D1	BPWD105A	E43B/01A	127
1	P371A	MU PMP 1 MAIN GEAR LO PMP	PUMP	AB	On/Off	On	OFF	P371D	1,2	H/S C/S	1	N/A		N/A	N/A	N/A	129A
2	P372A	MU PMP 2 MAIN GEAR LO PMP	PUMP	AB	On/Off	On	OFF	P372D	1,2	H/S C/S	1	N/A		N/A	N/A	N/A	129A
1/2	T-4	MAKE-UP TANK	TANK	I	FUNCTIONAL	FUNCTIONAL	N/A	BWST	1,2	H/S C/S	1	M031C		N/A	N/A	N/A	136
1/2	T15-1	CLEAN WASTE RECEIVER TANK 1-2	TANK	A	FUNCTIONAL	FUNCTIONAL	N/A	T15-2	2	H/S C/S	1	M037C		N/A	N/A	N/A	148
1/2	T15-2	CLEAN WASTE RECEIVER TANK 1-2	TANK	A	FUNCTIONAL	FUNCTIONAL	N/A	T15-1	2	H/S C/S	1	M037C		N/A	N/A	N/A	148
1/2	T5-1	MIXED BED PURIF DEMINERALIZER 1-1	TANK	I	FUNCTIONAL	FUNCTIONAL	N/A	T5-2	2	H/S C/S	1	M031A		N/A	N/A	N/A	147
1/2	T5-2	MIXED BED PURIF DEMINERALIZER 1-2	TANK	I	FUNCTIONAL	FUNCTIONAL	N/A	T5-1	2	H/S C/S	1	M031A		N/A	N/A	N/A	147
1/2	T5-3	CATION BED PURIF DEMINERALIZER 1-3	TANK	I	FUNCTIONAL	FUNCTIONAL	N/A	T5-1, 2	2	H/S C/S	1	M031A		N/A	N/A	N/A	147
1/2	MU110	CLEAN WASTE TANKS INLET LINE ISO VLV	MAN	A	CLOSED	OPEN	AS IS		2	H/S C/S	1	M037C		N/A	N/A	N/A	149
1/2	MU149	CLEAN WASTE TANKS INLET LINE ISO VLV	MAN	C	CLOSED	OPEN	AS IS		2	H/S C/S	1	M037C		N/A	N/A	N/A	149
1/2	MC1453	CLEAN WST PRI DEMIN IN VLV	SOV	C	Open	CLOSED	FC		2	H/S C/S	1	M037C	SC	BC3715(DC)	ACV1453A	ES68/07	151
1/2	MC1743	CLEAN WST RCVR TK IN VLV	SOV	A	OPEN	OPEN	FC		2	H/S C/S	1	M037C		[illegible]	ACV1743A	ES68/11	151
1/2	MC1747	CLEAN WST RCVR TK IN VLV	SOV	A	Open	Open	FC		2	H/S C/S	1	M037C	SC	C1702	ACV1743A	ES68/11	151
1/2	MC3560	DEGASIFIER BYPASS VLV	SOV	C	Close	Open	FO		2	H/S C/S	1	M037D		C1702	ACV1747A	ES68/11	151
														C1702(AC)	ACV1747A	ES68/11	151
														BC1761(DC)	ACV1747A	ES68/11	151
														C5718(AC)	ACV3560A	ES68/16	151
														BC3715(DC)	ACV3560A	ES68/16	151

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP 3-REACTOR HEAT REMOVAL 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

DAVIS BESSE UNIT 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - NI

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR--MANCE GOALS	REQUIRED FOR H/S, C/S	PRIOR--ITY	MELB 1-LINE	ACTION/OK SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAGRAM / SHT	WIRES
1	NI-5874A	SOURCE RANGE IND	IND	FT	ON	ON	OFF		4	H/S C/S	2	M0305		C4806	1NI5874A	E1049/1	153
1	NI-5874C	LOCAL SOURCE RANGE IND	IND	DC	ON	ON	OFF	NI-5874A	4	H/S C/S	1	M0304		Y15	1NI-5874C	E1049/1	153
2	NI-5875A	SOURCE RANGE IND	IND	FT	ON	ON	OFF		4	H/S C/S	2	M0306		C4802	2NI5875E	E1049/3	153
2	NI-5875C	LOCAL SOURCE RANGE IND	IND	DF	ON	ON	OFF	NI-5875A	4	H/S C/S	1	M0308		C4802	2NI5875E	E1049/3	153
2	NI-N11	SOURCE RANGE IND	IND	FT	ON	ON	OFF		4	H/S C/S	1	NEW		C5765E	2IRPSN03A	E7301A/03	153
1	NI-N12	SOURCE RANGE IND	IND	FT	ON	ON	OFF		4	H/S C/S	1	NEW		C5762E	1IRPSN03A	E7301A/03	153

end

PRIO-ITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT/MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - NNI

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	PRID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
2	FI-4031	4KV TRAIN 2 FLOW IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4031C		CS760D CS703 CS755G	AUNN1672P 2LLN031A 2LLN031B	E632B/11 E728A/12 E728A/12	163 163 163
2	FI-4034	4KV TRAIN 2 FLOW IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4031C		CS760D CS703 CS755G	ACNN1673C 2LLN034A 2LLN034A	E632B/11 E728A/13 E728A/13	163 163 163
1	FIHL125	RC RL FLOW-HI RANGE	IND	FF	ON	ON	OFF		4	H/S C/S	1	4031C		CS763M	1LLN425A	E631B/12	163
1	FIHL35	RC RL FLOW-LOW RANGE	IND	FF	ON	ON	OFF		4	H/S C/S	1	4031C		CS763M	1LLN435A	E631B/12	163
2	FY1-HP03A	HPI FLOW INDICATION	IND	FF	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ629	2LHP03AA	E734A/06	162
2	FY1-HP03A1	HPI FLOW IND (ASP)	IND	R	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ629	2LHP03AA	E734A/6	162
2	FY1-HP03B	HPI FLOW INDICATION	IND	FF	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ629	2LHP03BA	E734A/06	162
2	FY1-HP03B1	HPI FLOW IND (ASP)	IND	R	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ629	2LHP03BA	E734A/6	162
1	FY1-HP03C	HPI FLOW INDICATION	IND	FF	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ628	1LHP03CA	E734A/07	162
1	FY1-HP03C1	HPI FLOW IND (ASP)	IND	R	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ628	1LHP03CA	E734A/7	162
1	FY1-HP03D	HPI FLOW INDICATION	IND	FF	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ628	1LHP03DA	E734A/07	162
1	FY1-HP03D1	HPI FLOW IND (ASP)	IND	R	ON	ON	OFF		1,2	H/S C/S	1	4033A		CJ628	1LHP03DA	E734A/7	162
1	LI-RC14-1	PRZR LEVEL IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030A		CJ630	1LRC143C	E734A/03	154
2	LI-RC14-2	PRZR LEVEL IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030A		CJ630	2LRC141B	E734A/3	154
1	LI-RC14-3	PRZR LEVEL IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CJ630	1LRC143C	E734A/3	154
2	LI-RC14-4	PRZR LEVEL IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CJ630	2LRC141C	E734A/3	154
2	LI-SP09A1	SG1-2 START-UP LEVEL IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	2LSP09A3C	E734A/2	157
2	LI-SP09A3	SG1-2 START-UP LEVEL IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	2LSP09A3C	E734A/2	157
2	LI-SP09A8	SG1-2 START-UP LEVEL IND (CS792A)	IND	FF	ON	ON	OFF	LI-SP09A1	4	H/S C/S	2	4007A		CS792A	2LSGT21A	E658/03A	158
2	LI-SP09A8A	SG1-2 START-UP LEVEL IND (CS710)	IND	FF	ON	ON	OFF	LI-SP09A1	4	H/S C/S	2	4007A		CS792A	2LSGT21E	E658/3A	157
2	LI-SP09A9	SG1-2 START-UP LEVEL IND	IND	FF	ON	ON	OFF	LI-SP09A1	4	H/S C/S	2	4007A		CS792A	2LSGT41A	E658/03A	158
1	LI-SP0981	SG1-1 START-UP LEVEL IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	1LSP098C	E734A/02	157
1	LI-SP0983	SG1-1 START-UP LEVEL IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	1LSP098C	E734A/02	157
1	LI-SP0988	SG1-1 START-UP LEVEL IND (CS761A)	IND	FF	ON	ON	OFF	LI-SP0981_3	4	H/S C/S	2	4007A		CS761A	1LSGT11B	E658/03	158
1	LI-SP0988A	SG1-1 START-UP LEVEL IND (CS706)	IND	FF	ON	ON	OFF	LI-SP0981_3	4	H/S C/S	2	4007A		CS761A	1LSGT11E	E658/03	157
1	LI-SP0989	SG1-1 START-UP LEVEL IND	IND	FF	ON	ON	OFF	LI-SP0981_3	4	H/S C/S	2	4007A		CS761A	1LSGT31B	E658/03	158
2	LRS-RC14	PRZR LEVEL RECORDER	REC	FF	ON	ON	OFF	LI-RC14-1-4	4	H/S C/S	2	4030A		CS759B	RLNN1530	E726A/7	155
2	PI-6365A	RCS LOOP 2 EXTENDED RANGE PRESS	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CJ630	2LP6365AB	E734A/8	159
2	PI-6365A1	RCS LOOP2 EXTENDED RANGE PRESS (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030B		CJ629	2LP6365AB	E734A/8	159
1	PI-6365B	RCS LOOP 1 EXTENDED RANGE PRESS	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CJ628	1LP6365BB	E734A/8	159
1	PI-6365B1	RCS LOOP 1 EXTENDED RANGE PRESS (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030B		CJ628	1LP6365BB	E734A/8	159
2	PI-RC2A3	RCS LOOP 2 PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CS756D	4LSFPT41A	E762	159
2	PI-RC2A4	RCS LOOP 2 PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CS755C	2LSFPT21A	E762	159
1	PI-RC2B3	RCS LOOP 1 PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CS763D	3LSFPT31A	E762	159
1	PI-RC2B4	RCS LOOP 1 PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CS762C	1LSFPT11A	E762	159
2	PI-SP12A	SG1-2 OUTLET PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	2LSP12A2A	4E30-320	156
2	PI-SP12A1	SG1-2 OUTLET PRESS IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	2LSP12A2A	E734A/1	156
2	PI-SP12A1-A	SG1-2 OUTLET PRESS IND	IND	FF	ON	ON	OFF	PI-SP12A	4	H/S C/S	2	4007A		CS760D	ALSP12A1A	E728A/08	156
1	PI-SP12B	SG1-1 OUTLET PRESS IND	IND	FF	ON	ON	OFF		4	H/S C/S	1	4007A		CS760D	ALNN1652T	E728A/8	156
1	PI-SP12B1	SG1-1 OUTLET PRESS IND (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4007A		CJ630	1LSP12B1A	4E30-320	156
1	PI-SP12B2	SG1-1 OUTLET PRESS IND	IND	FF	ON	ON	OFF	PI-SP12B-1	4	H/S C/S	2	4007A		CJ630	1LSP12B1A	E734A/01	156
2	TE-RC3A6	RCS LOOP 2 HOT LEG TEMP (RM 427)	TE	D	ON	ON	OFF		4	H/S C/S	1	4030A		CS759K CS759B	2LSP12B2A RLNN1699T	E727A/7 E726/15	156 156
1	TE-RC3B5	RCS LOOP 1 HOT LEG TEMP (RM 402)	TE	D	ON	ON	OFF		4	H/S C/S	1	4030A		CS755G	2LTRC346	E905A/03	104
2	TE-RC4A2	RCS LOOP 2 COLD LEG TEMP (RM 427)	TE	D	ON	ON	OFF		4	H/S C/S	1	4030A		CS763A	1LTRC385A	E905A/3	104
1	TE-RC4B3	RCS LOOP 1 COLD LEG TEMP (RM 402)	TE	D	ON	ON	OFF		4	H/S C/S	1	4030A		CS759B	RLNN1545V	E726A/08	104
2	TI-RC3A4	RCS LOOP 2 HOT LEG TEMP (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030A		CS760D	ALNN1833H	E728A/5	104
2	TI-RC3A5	RCS LOOP 2 HOT LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030B		CS755K	2LRPSN07B	E731A/07	161
2	TI-RC3A6	RCS LOOP 2 HOT LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS763A	1LTRC345C	E905A/03	161
1	TI-RC3B2	RCS LOOP 1 HOT LEG TEMP (ASP)	IND	R	ON	ON	OFF		4	H/S C/S	1	4030A		CS755G	2LTRC346C	E905A/03	161
1	TI-RC3B5	RCS LOOP 1 HOT LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS762F	1LRPSN07B	E730A/07	161
1	TI-RC3B6	RCS LOOP 1 HOT LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS763A	1LTRC385C	E905A/03	161
2	TI-RC4A2	RCS LOOP 2 COLD LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS755G	2LTRC386C	E905A/03	161
2	TI-RC4A4	RCS LOOP 2 COLD LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS759K	RLNN1548	E726A/08	160
1	TI-RC4B1	RCS LOOP 1 COLD LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS760D	ALNN1833A	E728A/05	160
1	TI-RC4B4	RCS LOOP 1 COLD LEG TEMP	IND	FF	ON	ON	OFF		4	H/S C/S	1	4030A		CS759B	RLNN1540	E726A/08	160
														CS760D	ALNN1833C	E728A/05	160

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - RCS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S, C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAG./SHT.	NOTES
1	RC11	PORV BLOCK VLV	MOV	D	open	Open/Close	AS IS		2	H/S C/S	1	M030A	H/L	E16B	1PBE1602A	E52B/12	174
2	RC133	RCS CODE SAFETY VALVE	SV	D	Closed	Closed	Closed		3	H/S C/S	1	M030A		N/A	N/A	N/A	206
1	RC138	RCS CODE SAFETY VALVE	SV	D	Closed	Closed	Closed		3	H/S C/S	1	M030A		N/A	N/A	N/A	206
1/2	RC147	PRESSURIZER VENT HEADER CONTROL VLV	MAN	D	OPEN	CLOSED	AS-IS	RC240	2	H/S C/S	3	M030A	B	N/A	N/A	N/A	204
2	RC200	PZR SMPL CTMT VNT HDR VLV	MOV	D	Closed	Open/Close	AS IS		2	H/S C/S	1	M030A	H/L SD	F12A	2PBF1285J	E52B/11	172
2	RC239A	PZR VAPOR SMPL VLV	MOV	D	Closed	Open/Close	AS IS	RC200	2	H/S C/S	1	M030A	H/L SD	F11A	2PBF1126A	E52B/14A	172
2	RC239B	PZR LIQUID SMPL VLV	MOV	D	Closed	Closed	AS IS	RC200	2	H/S C/S	2	M030A	H/L SD	F11A	2PBF1127A	E52B/14	172
2	RC24	PZR PORV	SOV	D	Closed	Open/Close	FC		2	H/S C/S	1	M030A	H/L SD	C5705(AC)	RCVRC2D	E52B/13	171
														RC3716(DC)	RCVRC2B	E52B/13	171
1	RC4608A	SG 1 HI-PT VENT VLV	SOV	D	Closed	Closed	FC	RC4604B	2	H/S C/S	1	M030A	H/L SD	C5799(AC)	1CV4608AC	E52B/71A	175
														RC3706(DC)	1CV4608AD	E52B/71A	175
1	RC4604B	SC 1 HI-PT VENT VLV	SOV	D	Closed	Closed	FC	RC4608A	2	H/S C/S	2	M030A	H/L SD	C5799(AC)	1CV4604AC	E52B/71B	175
2	RC4610A	SG 2 HI-PT VENT VLV	SOV	D	Closed	Closed	FC	RC4610B	2	H/S C/S	1	M030A	H/L SD	C5708(AC)	2CV4610AC	E52B/71A	175
														RC4604(DC)	2CV4610AD	E52B/71A	175
2	RC4610B	SG 2 HI-PT VENT VLV	SOV	D	Closed	Closed	FC	RC4610A	2	H/S C/S	2	M030A	H/L SD	C5708(AC)	2CV4610BC	E52B/71B	175
2	RC4632	COLD LEG SG1-2 SMPL VLV	SOV	D	Closed	Closed	FC	RC260	2	H/S C/S	2	M030A	H/L SD	C5705(AC)	2CV4602D	E56B/47A	172

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL, 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - SFAS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC. OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN PNL	PERFOR-MANCE GOALS	REQUIRED FOR H/S, C/S	PRIOR-ITY	PI/D 1-LINE	HIGH/LOW SPURIOUS, BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DIAGR./SHT.	NOTES
1/2	C5755D	SFAS CH.2 LOGIC PANEL	PNL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	2CV207A	E6414 Sh	198
1/2	C5762D	SFAS CH.1 LOGIC PANEL	PNL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1CV107A	E6414 Sh	198
1/2	C5763D	SFAS CH.3 LOGIC PANEL	PNL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	3CV307A	E6414 Sh	198
1/2	C5764D	SFAS CH.4 LOGIC PANEL	PNL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	4CV407A	E6415 Sh	198
1/2	HIS6453	SG Auto Essen Level Control	HIS	DJ	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1CLV6453A	E448/24	198
1/2	HIS6454	SG Auto Essen Level Control	HIS	DJ	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	2CLV6454A	E448/24	198
1/2	LI1525A	BWST Level Indicator	LI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1601A	E762	198
1/2	LI1525B	BWST Level Indicator	LI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1651A	E762	198
1/2	LI1525C	BWST Level Indicator	LI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1603A	E762	198
1/2	LI1525D	BWST Level Indicator	LI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1653A	E762	198
1/2	LSL-525A1	BWST Level Switch	LSL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF5811A	E762	198
1/2	LSL1525B1	BWST Level Switch	LSL	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF5821A	E762	198
1/2	LT1525A	BWST Level Transmitter	LT	AC	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1LSFLT11A	E762, 6378	198
1/2	LT1525B	BWST Level Transmitter	LT	AC	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	2LSFLT21A	E762, 6378	198
1/2	LT1525C	BWST Level Transmitter	LT	AC	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	3LSFLT31A	E762, 6378	198
1/2	LT1525D	BWST Level Transmitter	LT	AC	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	4LSFLT41A	E762, 6378	198
1/2	PI2000	CTMT Vessel Press Indicator	PI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1601A	E762	198
1/2	PI2001	CTMT Vessel Press Indicator	PI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1651A	E762	198
1/2	PI2002	CTMT Vessel Press Indicator	PI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1603A	E762	198
1/2	PI2003	CTMT Vessel Press Indicator	PI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1653A	E762	198
1/2	PSH2000B	CTMT Vessel Press Switch	PSH	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF5812A	E762	198
1/2	PSH2001B	CTMT Vessel Press Switch	PSH	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF5822A	E762	198
1/2	PT2000	CTMT Vessel Press Xmtr	PT	V	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1LSFPT12A	E762	198
1/2	PT2001	CTMT Vessel Press Xmtr	PT	EE	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	2LSFPT22A	E762	198
1/2	PT2002	CTMT Vessel Press Xmtr	PT	EE	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	3LSFPT32A	E762	198
1/2	PT2003	CTMT Vessel Press Xmtr	PT	CC	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	4LSFPT42A	E762	198
1/2	RE2004	CTMT Vessel Rad Monitor	RE	D	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1LSFRE11A	E762	198
1/2	RE2005	CTMT Vessel Rad Monitor	RE	D	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	2LSFRE21A	E762	198
1/2	RE2006	CTMT Vessel Rad Monitor	RE	D	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	3LSFRE31A	E762	198
1/2	RE2007	CTMT Vessel Rad Monitor	RE	D	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	4LSFRE41A	E762	198
1/2	RI2004	CTMT Vessel Radiation Ind	RI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1601A	E762	198
1/2	RI2005	CTMT Vessel Radiation Ind	RI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1651A	E762	198
1/2	RI2006	CTMT Vessel Radiation Ind	RI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	ALSF1603A	E762	198
1/2	RI2007	CTMT Vessel Radiation Ind	RI	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF1653A	E762	198
1/2	RSH2004A	CTMT Vessel Radiation Sw	RSH2	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	1LSFS4113A	E762	198
1/2	RSH2005A	CTMT Vessel Radiation Sw	RSH	FF	Off	Off	Off		5	H/S-C/S	1	N/A	SA	N/A	BLSF5823A	E762	198

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT

PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

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License Number NPF-3
Serial Number 1805
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DAVIS BESSE Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - SFRCS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP.	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR-MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR-ITY	P&ID 1-LINE	HIGH/LOW, SPURIOUS, BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1/2	HIS1008	LOGIC CH 2 TRIP BLOCK/PERMISSIVE	HIS	FF	ON	ON	OFF		5	H/S C/S	1	E18/1	SA	C5702A	2CRC2121A	E65B/6A	1,4
1/2	HIS100C	LOGIC CH 4 TRIP BLOCK/PERMISSIVE	HIS	FF	ON	ON	OFF		5	H/S-C/S	1	E18/2	SA	C5702A	2CRC2141A	E65B/6A	1,4
1/2	HIS1018	LOGIC CH 1 TRIP BLOCK/PERMISSIVE	HIS	FF	ON	ON	OFF		5	H/S-C/S	1	E18/1	SA	C5761A	1CRC2111A	E65B/6	1,4
1/2	HIS101C	LOGIC CH 3 TRIP BLOCK/PERMISSIVE	HIS	FF	ON	ON	OFF		5	H/S-C/S	1	E18/1	SA	C5761A	1CRC2131A	E65B/6	1,4
1	HIS3869A	BLOCK CIRCUIT AF3869 (AFP-1 TO SG-1)	HIS	FF	off	off	on		3	H/S C/S	1	E18/1		N/A	1CRSCC21A	SF003B/3	2
														N/A	1CRSCC23A	SF003B/3	2
1	HIS3870A	BLOCK CIRCUIT AF3870 (AFP-1 TO SG-2)	HIS	FF	off	off	on		3	H/S C/S	1	E18/1		N/A	2CRSCC21A	SF003B/5	2
														N/A	2CRSCC23A	SF003B/5	2
2	HIS3871A	BLOCK CIRCUIT AF3871 (AFP-2 TO SG-1)	HIS	FF	off	off	on		3	H/S C/S	1	E18/2		N/A	2CRSCC22A	SF003B/4	2
														N/A	2CRSCC24A	SF003B/4	2
2	HIS3872A	BLOCK CIRCUIT AF3872 (AFP-2 TO SG-2)	HIS	FF	off	off	on		3	H/S C/S	1	E18/2	SA	N/A	2CRSCC22A	SF003B/6	2
														N/A	2CRSCC24A	SF003B/6	2
2	HIS6038	BLOCK CIRCUIT AS603 (SG-2 DRAIN STOP)	HIS	FF	off	off	on		3	H/S C/S	1	E18/2	SA	N/A	2CRSCC12A	SF003B/20	2
														N/A	2CRSCC14A	SF003B/20	2
1	HIS6118	BLOCK CIRCUIT AS611 (SG-1 DRAIN STOP)	HIS	FF	off	off	on		3	H/S C/S	1	E18/1	SA	N/A	1CRSCC11A	SF003B/19	2
														N/A	1CRSCC13A	SF003B/19	2
1	HFS6401	CH 1/3 MANUAL START AFPT-1 CS707	HIS	FF	OFF	ON	OFF		5	H/S-C/S	1	E18/1	SA	N/A	1CRSCC11A	E65B/8	2
														N/A	1CRSCC13A	E65B/8	2
2	HIS6402	CH 2/4 MANUAL START AFPT-2 CS707	HIS	FF	OFF	ON	OFF		5	H/S-C/S	1	E18/2	SA	N/A	2CRSCC12A	E65B/8A	2
														N/A	2CRSCC14A	E65B/8A	2
1	HIS6403	CH 1/3 MAN STRT AFPT-1 & ISOL SG-1	HIS	FF	OFF	ON	OFF		5	H/S-C/S	1	E18/1	SA	N/A	1CRSCC11A	E65B/8	2
														N/A	1CRSCC13A	E65B/8	2
2	HIS6404	CH 2/4 MAN STRT AFPT-2 & ISOL SG-2	HIS	FF	OFF	ON	OFF		5	H/S-C/S	1	E18/2	SA	N/A	2CRSCC12A	E65B/8A	2
														N/A	2CRSCC14A	E65B/8A	2
1/2	LLTSP9A6	SG2 CH 1 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/1	SA	C5761A	1LSGLT11A	E65B/3	2
1/2	LLTSP9A7	SG2 CH 3 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/1	SA	C5761A	1LSGLT31A	E65B/3	2
1/2	LLTSP9A8	SG2 CH 2 SU LEVEL 0-250" XMTR & CS	LLT	D	ON	ON	OFF		4	H/S C/S	1	E18/1	SA	C5702A	2LSGLT21A	E65B/3A	2
1/2	LLTSP9A9	SG2 CH 4 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/2	SA	C5702A	2LSGLT41A	E65B/3A	2
1/2	LLTSP986	SG1 CH 2 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/2	SA	C5702A	2LSGLT21B	E65B/3A	1, 4
1/2	LLTSP987	SG1 CH 4 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/2	SA	C5702A	2LSGLT41B	E65B/3A	1, 4
1/2	LLTSP988	SG1 CH 1 SU LEVEL 0-250" XMTR & CS	LLT	D	ON	ON	OFF		4	H/S C/S	1	E18/1	SA	C5761A	1LSGLT11B	E65B/3	2
1/2	LLTSP989	SG1 CH 3 SU LEVEL 0-250" XMTR	LLT	D	ON	ON	OFF		5	H/S C/S	1	E18/1	SA	C5761A	1LSGLT31B	E65B/3	2
1/2	PDS2685A	CH 2 MN FW - SG2 PRESSURE SWITCH	PDS	II	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPD21B	E65B/2A	2
1/2	PDS2685B	CH 2 MN FW - SG2 PRESSURE SWITCH	PDS	II	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPD41B	E65B/2A	2
1/2	PDS2685C	CH 1 MN FW - SG2 PRESSURE SWITCH	PDS	II	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPD11C	E65B/2	2
1/2	PDS2685D	CH 3 MN FW - SG2 PRESSURE SWITCH	PDS	II	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPD31C	E65B/2	2
1/2	PDS2686A	CH 1 MN FW - SG1 PRESSURE SWITCH	PDS	DE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPD11B	E65B/2	2
1/2	PDS2686B	CH 3 MN FW - SG1 PRESSURE SWITCH	PDS	DE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPD31B	E65B/2	2
1/2	PDS2686C	CH 2 MN FW - SG1 PRESSURE SWITCH	PDS	DE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPD21C	E65B/2A	2
1/2	PDS2686D	CH 2 MN FW - SG1 PRESSURE SWITCH	PDS	DE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPD41C	E65B/2A	2
1/2	PS3687A	CH 2 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS21E	E65B/1A	2
1/2	PS3687C	CH 2 MN STM LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS21I	E65B/1G	2
1/2	PS3687E	CH 4 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS41E	E65B/1A	2
1/2	PS3687G	CH 4 MN STM LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS41I	E65B/1A	2
1/2	PS3687K	CH 2 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS21G	E65B/1A	2
1/2	PS3687L	CH 2 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS21H	E65B/1A	2
1/2	PS3687R	CH 4 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS41G	E65B/1A	2
1/2	PS3687N	CH 2 MN STM LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	N/A	2CRCPS41H	E65B/1A	2
1/2	PS3689B	CH 1 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS11E	E65B/1	2
1/2	PS3689D	CH 1 MS LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS11J	E65B/1	2
1/2	PS3689F	CH 3 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS31E	E65B/1	2
1/2	PS3689H	CH 3 MS LINE 2 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS31J	E65B/1	2
1/2	PS3689K	CH 1 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS11G	E65B/1	2
1/2	PS3689L	CH 1 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS11N	E65B/1	2
1/2	PS3689M	CH 3 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS31G	E65B/1	2
1/2	PS3689N	CH 3 MS LINE 1 PRESSURE SWITCH	PS	EE	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	N/A	1CRCPS31N	E65B/1	2
1/2	RCP1	CH 1 RCP MONITOR RELAY CONTACT	RCPM	D	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	RC3601	1CRCPM11B	E65B/4	2
1/2	RCP2	CH 2 RCP MONITOR RELAY CONTACT	RCPM	D	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	RC3602	2CRCPM21B	E65B/4A	2
1/2	RCP3	CH 3 RCP MONITOR RELAY CONTACT	RCPM	D	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/1	SA	RC3603	1CRCPM31B	E65B/4	2
1/2	RCP4	CH 4 RCP MONITOR RELAY CONTACT	RCPM	D	CLOSED	CLOSED	OPEN		5	H/S-C/S	1	E18/2	SA	RC3604	2CRCPM41B	E65B/4A	2

PRIORITY - 1- REQUIRED FOR/OR COMPONENT FOR SHUTDOWN, 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING, 5-SUPPORT FUNCTIONS

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Davis Besse Unit 1 — APPENDIX A — AREA OPTIMIZATION

SAFE SHUTDOWN COMPONENT LIST

SYSTEM - SWS

TRAIN	COMPONENT	DESCRIPTION	TYPE	LOC OF COMP	NORMAL POSITION	SHUTDOWN POSITION	FAILED POSITION	THIS COMPONENT ALTERNATE SHUTDOWN FOR	PERFOR--MANCE GOALS	REQUIRED FOR H/S C/S	PRIOR--ITY	P&ID 1-LINE	HIGH/LOW SPURIOUS BOUNDARY	POWER SUPPLY	CIRCUIT SCHEME	ELEMENTARY WIRING DRAW./SHT.	NOTES
1/3	P180	BACKUP SW PUMP	PUMP	RD	Off	On	Off	SWS TRAIN 1&2	5	H/S C/S	3	M041A		C2	APAP1800A APAP1800A	E48B/37D	180 180
1	P3-1	SW PUMP 1	PUMP	RF	on/off	On	Off		5	H/S C/S	1	M041A		C1	1PAC107A	E48B/06A	179
2	P3-2	SW PUMP 2	PUMP	RF	on/off	On	Off		5	H/S C/S	1	M041A		D1	2PAD107A	E48B/06C	179
1/2	P3-3	SW PUMP 3	PUMP	RF	on/off	On	Off	P3-1,P3-2	5	H/S C/S	1	M041A		C1	1PAC109A	E48B/11A	179
														D1	2PAD109A	E48B/11E	179
														AC06	3PAC006A	E48B/11C	179
														C1	1CAC04D	E48B/11C	179
														D1P	1PD1706A	E66A/1A	179
														D1	2CAC05D	E48B/4C	179
														D2P	2PD2706A	E540A/2A	179
1	SW1356	CAC 1 OUT ISO VLV	SOV	DJ	open/close	open	FO		5	H/S C/S	1	M041C		C5716(AC)	1CV1356D	E48B/13	184
														RC3701(DC)	1CV1356A	E48B/13	184
2	SW1357	CAC 2 OUT ISO VLV	SOV	DJ	open/close	open	FO		5	H/S C/S	1	M041C		C5716(AC)	2CV1357D	E48B/13	184
														RC3702(DC)	2CV1357A	E48B/13	184
1/2	SW1358	CAC 3 OUT ISO VLV	SOV	DJ	open/close	open	FO		5	H/S C/S	1	M041C		C5716(AC)	1CV1358L	E48B/33C	184
														C5716(AC)	2CV1358L	E48B/33C	184
														RC3701(DC)	1CV1358C	E48B/33C	184
														RC3701(DC)	2CV1358A	E48B/33C	184
														RC3702(DC)	2CV1358B	E48B/33C	184
1	SW1366	CAC 1 IN ISO VLV	MOV	DJ	open	open	AS IS		5	H/S C/S	1	M041C	SC	E11C	1PNE1142A	E48B/12	184
2	SW1367	CAC 2 IN ISO VLV	MOV	DJ	open	open	AS IS		5	H/S C/S	1	M041C	SC	F12A	2PNE1223A	E48B/12	184
1/2	SW1368	CAC 3 IN ISO VLV	MOV	DJ	closed	closed	AS IS		5	H/S C/S	1	M041C	R SC	E12A	1PNE1207A	E48B/14A,C	184
														EF12D	3PNE1207H	E48B/14A,C	184
														F12A	2PNE1224A	E48B/14B,C	184
1	SW1382	AFP 1 SUCT VLV FROM SW	MOV	E	closed	open/close	AS IS		5	C/S	1	M041C		E12A	1PNE1218A	E48B/06A,B	186
														F12A	1CPS4928C	E48B/1B	186
														CDE-12A-1	1CSW03A	E48B/6D	186
2	SW1383	AFP 2 SUCT VLV FROM SW	MOV	DR	closed	open/close	AS IS		5	H/S C/S	1	M041C		E11C	2PNE1177A	E48B/06A,B	186
														F11C	2CPS4929C	E48B/1B	186
														CDF11C	2CSW04A	E48B/6B	186
2	SW1395	TPCW HX IN HEADER ISO VLV	MOV	11	open/close	closed	AS IS		5	H/S C/S	1	M041A		F12C	2PNE1277A	E48B/09A,B	188
1	SW1399	TPCW HX IN HEADER ISO VLV	MOV	11	open/close	closed	AS IS		5	H/S C/S	1	M041A		E12C	1PNE1277A	E48B/09A,B	188
1	SW1424	SW FROM CC HX 1 ISO VLV	SOV	T	open/close	open	FO		5	H/S C/S	1	M041B		C5716(AC)	1CV1424D	E48B/3B	183
														C5763B(DC)	1CV1424C	E48B/3B	183
1/2	SW1429	SW FROM CC HX 3 ISO VLV	SOV	T	open/close	open	FO		5	H/S C/S	1	M041B		C5716(AC)	1CV1429C	E48B/31A	183
														C5716(AC)	2CV1429C	E48B/31A	183
														C5756D(DC)	2CV1429B	E48B/31A	183
														C5756D(DC)	3CV1429B	E48B/31A	183
														C5763C(DC)	3CV1429A	E48B/31A	183
														C5763D(DC)	1CV1429B	E48B/31A	183
2	SW1434	SW FROM CC HX 2 ISO VLV	SOV	T	open/close	open	FO		5	H/S C/S	1	M041B		C5716(AC)	2CV1434D	E48B/3B	183
														C5756D(DC)	2CV1434C	E48B/3B	183
1	SW2927	CTRM EVS COND UNIT IN VLV	MOV	HH	closed	open	AS IS		5	H/S C/S	1	M041N		E12A	1PNE1232A	E48B/27	182
2	SW2928	CTRM EVS COND UNIT IN VLV	MOV	HH	closed	open	AS IS		5	H/S C/S	1	M041B		F11A	2PNE1232A	E48B/27	182
1	SW2929	SW TO INT STRU VLV	MOV	11	open/close	open	AS IS	SW2930, 31, 32	5	H/S C/S	2	M041C		E12C	1PNE1281A	E48B/28	187
2	SW2930	SW TO INT FOREBAY VLV	MOV	11	open/close	open	AS IS	SW2929, 31, 32	5	H/S C/S	2	M041C		F12C	2PNE1281A	E48B/26	187
1	SW2931	SW TO CLG TOWER 4U VLV	MOV	11	open/close	open	AS IS	SW2929, 30, 32	5	H/S C/S	2	M041C		E12C	1PNE1282A	E48B/28	187
2	SW2932	SW TO COLLECT BASIN VLV	MOV	11	open/close	open	AS IS	SW2929, 30, 31	5	H/S C/S	2	M041C		F12C	2PNE1282A	E48B/26	187
1	SW630	TPCW HX1 OUTLET	MOV	11	open	Closed		SW1395, SW1399	5	H/S C/S	2	M041A	A	N/A		N/A	189
2	SW631	TPCW HX2 OUTLET	MOV	11	open	Close		SW1395, SW1397	5	H/S C/S	2	M041A	A	N/A		N/A	189
1/2	SW632	TPCW HX3 OUTLET	MOV	11	open	Closed		SW1395, SW1397	5	H/S C/S	2	M041A	A	N/A		N/A	189

PRIORITY - 1- REQUIRED MINIMUM COMPONENT FOR SHUTDOWN 2-BACKUP COMPONENT, 3-ALTERNATE SHUTDOWN COMPONENT
PERFORMANCE GOALS - 1- REACTIVITY CONTROL 2- REACTOR COOLANT MAKEUP, 3-REACTOR HEAT REMOVAL, 4-PROCESS MONITORING 5-SUPPORT FUNCTIONS

FAOR APPENDIX C-3, "ASSOCIATED CIRCUITS" CHANGES

A markup of both the CARP, Appendix C-3, Associated Circuit Evaluation Summary, and of FAOR Appendix C-3, Breaker Coordination Evaluation Summary are provided to illustate the changes to the circuit analysis. Additions, deletions, and corrections are marked in the left margin using the code A, D, and C respectively. A summary is provided below for changes that resulted in the markup tables.

Changes as marked on CARP Appendix C-3

1. DELETED — C2 (9) AND D2 (9) entries which are non-essential 4160V buses that supply power to alternate shutdown equipment. These buses are stripped prior to use of the Motor Driven Feedwater Pump or Backup Service Water Pump which ensures the circuits cannot affect the analysis.

2. DELETED — Cables (11) that have been abandoned in place by design changes to various safe shutdown components.

3. DELETED — Redundant entries for (B) cables that are a continuation of the (A) cables such as through containment penetrations.

4. CORRECTION — Corrected circuit/component designation.

Changes as marked on FAOR Appendix C-3

1. ADDED — Safe shutdown power circuits (328) which were previously excluded. This was done to provide a complete listing and evaluation of coordination in this Appendix.

   Cabinets (62) and relay cabinet circuits (8) which are Safe Shutdown or associated power supplies were included.

   Y1A and Y2A (120 VAC panels) were included because they have a common power source with essential panels Y1 and Y2 and are associated power supplies.

2. ADDED — Fuse/Breaker type, and reference drawings to support feeder/load coordination calculations.

3. ADDED — 5th and 6th refueling outage modification information.

4. CORRECTION — Corrected circuit/component designation.

The FAOR reflects the plant configuration projected at the end of the 6th refueling outage and includes the specific manual actions needed due to coordination concerns. These include stripping C2, D2 and E12C loads prior to use of certain safe shutdown loads in specific Fire Areas (BG, BF, EE).

Davis Besse Unit 1
Revision : 5

APPENDIX C-3

Appendix R
Compliance Assesment Report

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
D	C2	APAC202A	MP1161	CLNG TWR MU PUMP 1-1	2000A	1200A	XXX	
	C2	APAC204A	MP0161	HTR DRN PUMP MTR 1-1	2000A	1200A	XXX	
	C2	APAC205A	DSC205	4.16 KV DISC SW DSC-205	2000A	1200A	XXX	
	C2	APAC206A	MP0071	CLNG WTR PUMP MTR 1-1	2000A	1200A	XXX	
	C2	APAC207A	MP0013	CNDS PUMP MTR 1-3	2000A	1200A	XXX	
	C2	APAC208A	MP0073	CLNG WTR PUMP MTR 1-3	2000A	1200A	XXX	
	C2	APAC210A	MP0011	CNDS PUMP MTR 1-1	2000A	1200A	XXX	
	C2	APAC211A	CE5	SW-YD FD 1-1/SUBSTA LTG	2000A	1200A	XXX	
	C2	APAC212A	MP0150	SU FEEDWATER PUMP	2000A	1200A	XXX	
	D1N	3CD1N15A	RC3603	RELAY CABINET RC3603	400A	30A	XXX	
	D1N	3PD1N14A	C4806	CRD BKR D SHUNT TRIP CKT	400A	30A	XXX	
	D1P	1CD1P12A	RC4801	RELAY CABINET RC4801	400A	30A	XXX	
	D1P	1CD1P15A	PDIS5017	PDIS5017	400A	5A	XXX	
	D1P	1CD1P24A	FSS815	AFPT 1 SPEED MONITOR	400A	5A	XXX	
	D1P	1PD1P10A	RC3706	RELAY CABINET	400A	35A	XXX	
	D1P	1PD1P14A	C4603	CRD BKR B SHUNT TRIP CKT	400A	30A	XXX	
D	D2	BPAD201A	MC1400	STATION AIR CMPRSR 1-2	2000A	1200A	XXX	
	D2	BPAD201B	MC1400	STATION AIR CMPRSR 1-2	2000A	1200A	XXX	
	D2	BPAD202A	MP1162	CLNG TWR MU PUMP 1-2	2000A	1200A	XXX	
	D2	BPAD204A	MP0162	HTR DRN PMP MTR 1-2	2000A	1200A	XXX	
	D2	BPAD205A	DSD205	4.16KV DISC SW DSD-205	2000A	1200A	XXX	
	D2	BPAD206A	MP0072	CLNG WTR PMP MTR 1-2	2000A	1200A	XXX	
	D2	BPAD207A	MP0012	CNDS PUMP MTR 1-2	2000A	1200A	XXX	
	D2	BPAD208A	MC0410	AUX BLDG FORCED DRAFT FAN	2000A	1200A	XXX	
	D2	BPAD211A	DF5	SW-YD FD 1-2/SUBSTA LTG	2000A	1200A	XXX	
	D2N	4CD2N15A	RC3604	RELAY CABINET RC3604	400A	30A	XXX	
	D2N	4PD2N14A	C4612	CRD BKR C SHUNT TRIP CKT	400A	30A	XXX	
	D2P	2CD2P15A	PDIS5018	PDIS5018	400A	5A	XXX	
D	D2P	2CD2P16A	PDS26858	PDS26858	400A	5A	XXX	
	D2P	2PD2P14A	C4606	CRD BKR A SHUNT TRIP CKT	400A	30A	XXX	
	DAN	ACDAN19A	C4603	CRD PRIMARY TRIP BKR A	200A	30A	XXX	
	DAN	ACDAN20A	XAC	BUS TIE XFMR AC	200A	20A	XXX	
	DAN	ACDAN21A	C1701	MISC WASTE EVAPORATOR PNL	200A	30A	XXX	
	DAN	ACDAN23A	C2701	BORIC ACID EVAPORATOR PNL	200A	30A	XXX	
	DAN	ACDAN24A	RC4802	RELAY CABINET	200A	30A	XXX	
	DAN	ACDAN25A	C3625	DG1-1 DC OIL PMP CTRL BOX	200A	10A	XXX	
	DAN	APDAN01A	C5750A	ALT GEN XFMR CABINET	200A	70A	XXX	
	DAN	APDAN02A	HA01	13.8KV SWGR A DC CTRL	200A	70A	XXX	
	DAN	APDAN02B	HAAC	13.8KV SWGR A DC CTRL				
	DAN	APDAN03A	E6	480VAC USS DC CTRL	200A	100A	XXX	
	DAN	APDAN04A	E2	480VAC USS DC CTRL	200A	100A	XXX	
	DAN	APDAN05A	E3	480VAC USS DC CTRL	200A	100A	XXX	
	DAN	APDAN06A	E4	480VAC USS DC CTRL	200A	100A	XXX	
	DAP	ACDAP19A	RC4601	RCS COOL CABINET	200A	30A	XXX	
	DAP	ACDAP21A	C3312	FIRE PROTECTION EQUIP	200A	20A	XXX	
	DAP	ACDAP21B	C3314	FIRE PROTECTION EQUIP				
	DAP	ACDAP21C	C3311	FIRE PROTECTION EQUIP				
	DAP	ACDAP21D	C3310	FIRE PROTECTION EQUIP				
	DAP	ACDAP21E	JT3635	FIRE PROTECTION EQUIP				
	DAP	ACDAP21F	C4105	FIRE PROTECTION EQUIP				
	DAP	ACDAP21G	FPS8701	FIRE PROTECTION EQUIP				
D	DAP	ACDAP21I	YBR3	FIRE PROTECTION EQUIP				
	DAP	ACDAP23A	X01	START UP XFMR 1	200A	20A	XXX	
	DAP	ACDAP24A	X11	AUX XFMR 11	200A	30A	XXX	
	DAP	ACDAP25A	C3305	GEN ISO PHASE BUS ANNUN	200A	30A	XXX	
	DAP	ACDAP26A	RC3717	RELAY CABINET	200A	30A	XXX	

D = Deletion
C = Correction

APPENDIX C-3

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
				INC FDR	LOAD	YES	NO
DAP	ACDAP26B	RC2825	RELAY CABINET				
DAP	ACDAP27A	RC3001	RELAY CABINET	200A	30A	XXX	
DAP	ACDAP27B	RC3003	RELAY CABINET				
DAP	ACDAP28A	RC3715	RELAY CABINET	200A	30A	XXX	
DAP	ACDAP28B	RC1760	RELAY CABINET				
DAP	ACDAP29A	RC4311	RELAY CABINET	200A	30A	XXX	
DAP	ACDAP29B	RC2404	RELAY CABINET				
DAP	ACDAP29C	RC3005	RELAY CABINET				
DAP	ACDAP30A	C3304	AUX BOILER CTRL PANEL	200A	30A	XXX	
DAP	ACDAP31A	HA01	13.8KV BRKR CTRL	200A	5A	XXX	
DAP	ACDAP31B	HA03	13.8KV BRKR CTRL				
DAP	ACDAP32A	BCE5	LTG DIST CENTER E5 BRKR	200A	30A	XXX	
DAP	ACDAP33A	C3610	RELAY CABINET	200A	30A	XXX	
DAP	ACDAP33B	C3617	RELAY CABINET				
DAP	APDAP01A	C5750A	GEN-XFMR RELAY BOARD	200A	70A	XXX	
DAP	APDAP02A	HA01	13.8KV SWGR BUS A DC CTRL	200A	70A	XXX	
DAP	APDAP02B	HAAC	13.8KV SWGR BUS A DC CTRL				
DAP	APDAP03A	E6	ALT 480VAC USS E6 DC CTRL	200A	100A	XXX	
DAP	APDAP04A	E2	480VAC USS F2 DC CTRL	200A	100A	XXX	
DAP	APDAP05A	E3	480VAC USS F3 DC CTRL	200A	100A	XXX	
DAP	APDAP06A	E4	ALT 480VAC USS E4 DC CTRL	200A	100A	XXX	
DAP	APDAP08A	D3602	FUSE PANEL D3602	200A	100A	XXX	
DBN	BCDBN19A	C4606	CRD PRIMARY TRIP BKR B	200A	30A	XXX	
DBN	BCDBN20A	XBD	BUS TIE XFMR BD	200A	20A	XXX	
DBN	BCDBN21A	C2702	MISC WASTE EVAPORATOR PNL	200A	30A	XXX	
DBN	BCDBN23A	BDF5	LTG DIST CENTER F5 BKR	200A	30A	XXX	
DBN	BCDBN24A	RC4804	RELAY CABINET	200A	30A	XXX	
DBN	BCDEN25A	C3626	DG 1-2 OIL PMP CTRL BOX	200A	10A	XXX	
DBN	BPDBN01A	C5750B	ALT GEN XFMR CABINET	200A	70A	XXX	
DBN	BPDBN02A	HB01	13.8KV SWGR A DC CTRL	200A	70A	XXX	
DBN	BPDBN02B	HB14	13.8KV SWGR A DC CTRL				
DBN	BPDBN04A	F2	480VAC USS DC CTRL	200A	100A	XXX	
DBN	BPDBN05A	F3	480VAC USS DC CTRL	200A	100A	XXX	
DBP	BCDBP09A	C6720	AVV POSITION INDICATION			XXX	
DBP	BCDBP17A	C4301	GEN VOLT REG CABINET	200A	35A	XXX	
DBP	BCDBP18A	JT5302	GEN FIELD BRKR JT5302	200A	35A	XXX	
DBP	BCDBP19A	C3303	GEN COOL SYS CABINET	200A	30A	XXX	
DBP	BCDBP20A	C3611	RELAY CABINET C3611	200A	30A	XXX	
DBP	BCDBP20B	C3618	RELAY CABINET C3618				
DBP	BCDBP21A	RC4602	RCS PRZR HEATERS CABINET	200A	30A	XXX	
DBP	BCDBP22A	C5105	COMB BUT VLV STN CABINET	200A	30A	XXX	
DBP	BCDBP23A	C5757B	EHC SYSTEM CABINET	200A	20A	XXX	
DBP	BCDBP24A	C1708	PROCESS SAMPLE PANEL	200A	10A	XXX	
DBP	BCDBP25A	JT5302	GEN FIELD RECT TEMP RLY	200A	20A	XXX	
DBP	BCDBP26A	HB01	13.8KV BKR HB01 CTRL	200A	5A	XXX	
DBP	BCDBP26B	HB03	13.8KV BKR HB03 CTRL				
DBP	BCDBP27A	X02	START-UP XFMR 02	200A	20A	XXX	
DBP	BCDBP28A	X1	MAIN XFMR 1	200A	30A	XXX	
DBP	BCDBP29A	RC3718	RELAY CABINET	200A	30A	XXX	
DBP	BCDBP29B	RC2826	RELAY CABINET				
DBP	BCDBP30A	RC1716	RELAY CABINET	200A		XXX	
DBP	BCDBP30B	RC1716	RELAY CABINET	200A		XXX	
DBP	BCDBP31A	RC4410	RELAY CABINET	200A	30A	XXX	
DBP	BCDBP31B	RC3004	RELAY CABINET				
DBP	BCDBP31C	RC3002	RELAY CABINET				
DBP	BCDBP32A	C3316	FIRE PROTECTION EQUIP	200A	20A	XXX	
DBP	BCDBP32B	C3315	FIRE PROTECTION EQUIP				
DBP	BCDBP32C	C3313	FIRE PROTECTION EQUIP				
DBP	BCDBP32D	C3636	FIRE PROTECTION EQUIP				
DBP	BCDBP32E	C5404	FIRE PROTECTION EQUIP				
DBP	BCDBP32G	Y6R4	FIRE PROTECTION EQUIP				

D = Deletion
C = Correction

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Appendix R
Compliance Assesment Report

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
	DBP	BCDBP32H	C5404	FIRE PROTECTION EQUIP				
	DBP	BCDBP33A	RC4401	RELAY CABINET	200A	30A	XXX	
	DBP	BCDBP33B	RC2304	RELAY CABINET				
	DBP	BCDBP33C	RC3006	RELAY CABINET				
	DBP	BCDBP34A	C5760C	ELEC METER & XDUCER CAB	200A	20A	XXX	
	DBP	BPDBP01A	C5750B	GEN-XFMR RELAY BOARD	200A	70A	XXX	
	DBP	BPDBP02A	HB01	13.8KV SWGR BUS B DC CTRL	200A	70A	XXX	
	DBP	BPDBP02B	HB14	13.8KV SWGR BUS B DC CTRL				
	DBP	BPDBP04A	F2	480VAC USS F2 DC CTRL	200A	100A	XXX	
	DBP	BPDBP05A	F3	480VAC USS F3 DC CTRL	200A	100A	XXX	
	DBP	BPDBP08A	D3603	FUSE PANEL D3603	200A	100A	XXX	
	DC MCC 1	APD111A	D37E1	EMER LTG XFR SW 1	500A	100A	XXX	
	DC MCC 1	APD112A	D57E1	EMER LTG XFR SW 3	500A	100A	XXX	
	DC MCC 1	APD113A	MP0724	RCP BACKUP OIL LIFT PMP	500A	60A	XXX	
D	DC MCC 1	APD113B					YYY	
	DC MCC 1	APD114A	MP0721	RCP BACKUP OIL LIFT PMP	500A	60A	XXX	
	DC MCC 1	APD114B						
D	DC MCC 1	APD115A	MP0281	MFPT 1 EMERG BRG OIL PMP	500A	50A	XXX	
	DC MCC 1	APD118A	MP0210	TG EMER BRG OIL PUMP	500A	225A	XXX	
	DC MCC 2	BPD211A	D41E1	EMER LTG XFR SW 2	500A	100A	XXX	
	DC MCC 2	BPD212A	D49E1	EMER LTG XFR SW 4	500A	100A	XXX	
	DC MCC 2	BPD213A	MP0723	RCP BACKUP OIL LIFT PMP	500A	60A	XXX	
D	DC MCC 2	BPD213B						
	DC MCC 2	BPD214A	MP0722	RCP BACKUP OIL LIFT PMP	500A	60A	XXX	
	DC MCC 2	BPD214B						
	DC MCC 2	BPD215A	MP0282	MFPT 2 EMERG BRG OIL PMP	500A	50A	XXX	
	DC MCC 2	BPD218A	MP0230	T-G H2 EMERG SEAL OIL PMP	500A	60A	XXX	
	E1	APBE113A	F13	480 VAC MCC	1600A	600A	XXX	
	E11A	1PBE1102A	MC0621	H2 DILUTION SYS BLOWER 1	600A	70A		XXX
	E11A	1PBE1104A	MV5439	ECCS RM 105 HVAC ISO VLV	600A	15A		XXX
	E11A	1PBE1107A	MV5440	ECCS RM 105 HVAC ISO VLV	600A	15A		XXX
	E11A	1PBE1113A	MV5090	CTMT H2 PURGE LINE 1 VLV	600A	15A		XXX
	E11A	1PBE1115A	MP891A	ECCS SUMP PUMP 1A	600A	30A		XXX
	E11A	1PBE1116A	MP891B	ECCS SUMP PUMP 1B	600A	30A		XXX
	E11A	1PBE1117A	MP893A	ECCS SUMP PUMP 3A	600A	30A		XXX
	E11A	1PBE1118A	MP893B	ECCS SUMP PUMP 3B	600A	30A		XXX
	E11A	1PBE1123A	MV2001	CTMT ISO VALVE PENET 72A	600A	15A		XXX
	E11A	1PBE1124A	MV2003	CTMT ISO VALVE PENET 74A	600A	15A		XXX
	E11A	1PBE1129A	MVRC10	PRZR SPRAY LINE ISO VLV	600A	15A		XXX
D	E11A	1PBE1129B						
	E11A	1PBE1135A	MV5422	ECCS RM 105 CLR 4 OUT VLV	600A	15A		XXX
	E11A	1PBE1136A	MV5421	ECCS RM 105 CLR 5 OUT VLV	600A	15A		XXX
	E11A	1PBE1170A	MV5038	CTMT H2 DILUT OUT ISO VLV	600A	15A		XXX
	E11A	APBE1109A	MV98U40	DEMIN WTR STOP VLV	600A	15A		XXX
	E11A	APBE1125A	MV98U12A	MU FILTER 1 IN VLV	600A	15A		XXX
	E11B	1PBE1108A	MV2012A	CTMT NORM SUMP ISO VLV	225A	15A		XXX
D	E11B	1PBE1108B						
	E11B	1PBE1155A	MV2735	PRZR SPRAY LINE ISO VLV	225A	15A		XXX
D	E11B	1PBE1155B						
	E11B	1PBE1158A	MV1567A	CC IN ISO VLV 1 TO CRD	225A	15A		XXX
D	E11B	1PBE1158B						
	E11B	1PBE1163A	MVCF02B	CF TANK 1 SAMPLE VALVE	225A	15A		XXX
D	E11B	1PBE1163B						
	E11B	1PBE1165A	MVCF05B	CF TANK 1 VENT VALVE	225A	15A		XXX
D	E11B	1PBE1165B						
	E11B	1PBE1169A	MC0561	CTMT RECIRCULATIN FAN 1	225A	150A		XXX
D	E11B	1PBE1169B						
	E11B	1PBE1181A	MV02-0A	RC PRZR SMPL VLV 1	225A	15A		XXX

D = Deletion
C = Correction

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
D	E11B	1PBE1181B						
	E11C	1PBE1137A	MV5070	CTMT VACM RELIEF VLV	225A	15A		XXX
	E11C	1PBE1138A	MV5071	CTMT VACM RELIEF VLV	225A	15A		XXX
	E11C	1PBE1139A	MV5072	CTMT VACM RELIEF VLV	225A	15A		XXX
	E11C	1PBE1140A	MV5073	CTMT VACM RELIEF VLV	225A	15A		XXX
	E11C	1PBE1141A	MV5074	CTMT VACM RELIEF VLV	225A	15A		XXX
	E11C	1PBE1144A	MV5261	CTRM EMER VENT FN IN VLV	225A	15A		XXX
	E11C	1PBE1159A	MV0612	MN FW 1 ISO VLV	225A	100A		XXX
	E11C	APBE1167A	BSWX7903	CTMT LIGHTING DISC SWITCH	225A	150A		XXX
D	E11C	APBE1167B						
	E11C	APBE1168A	X3901	CONTAINMENT LIGHTING XFMR	225A	70A		XXX
D	E11C	APBE1168B						
	E11C	APBE1179A	MP0411	PRI WTR XFER PUMP 1	225A	150A		XXX
	E11C	APBE1186A	NC3801	H2 RECOMBINATION STARTER	600A	100A		XXX
	E11C	APBE1186B	NC3802					
	E11C	APBE1186C	C3830					
	E11D	1PBE1133A	MV5067	CTMT H2 PURGE FN 1 IN VLV	225A	15A		XXX
	E11D	1PBE1195A	MV0831	DHR CLR 1 OUT XOVER	225A	15A		XXX
	E11D	1PBE1197A	MRE5327	CTRM VENT SYS VACM PMP 1	225A	15A		XXX
	E11D	1PBE1199A	MV1328	CC CRD BOOST PMP SUCT VLV	225A	15A		XXX
	E11D	APBE1185A	MP0381	BA PUMP 1	225A	20A		XXX
	E11D	APBE1188A	WE1711	BA ADD TANK 1 HEATER 1	225A	30A		XXX
	E11D	APBE1189A	WE1712	BA ADD TANK 1 HEATER 2	225A	30A		XXX
	E11E	1PBE1145A	MV06458	CTMT ISO VLV PENT 73	225A	15A		XXX
	E11E	1PBE1146A	MV4906	CTRM STANDBY COND 1 DMPR	225A	15A		XXX
	E12A	1PBE1201A	MS0611	CTRM STANDBY COND 1 FAN	600A	30A		XXX
	E12A	1PBE1213A	WMB1, 2, 3	Power Circuit (WMB1, 2, 3	600A	250A		XXX
D	E12A	1PBE1213B	WMB1, 2, 3	Power Circuit (WMB1, 2, 3				
	E12A	1PBE1214A	WMB1, 2, 3	Power Circuit (WMB1, 2, 3				
D	E12A	1PBE1214B	WMB1, 2, 3	Power Circuit (WMB1, 2, 3				
	E12A	1PBE1215A	WMB1, 2, 3	Power Circuit (WMB1, 2, 3				
D	E12A	1PBE1215B	WMB1, 2, 3	Power Circuit (WMB1, 2, 3				
	E12A	1PBE1219A	MC0301	EMER VENT FAN 1	600A	70A		XXX
	E12A	1PBE1220A	YRF1	480VAC/125VDC RECTIFIER	600A	30A		XXX
	E12A	1PBE1221A	YRF3	480VAC/125VDC RECTIFIER	600A	30A		XXX
	E12A	1PBE1237A	MC5017	EMER VENT DISCH FAN DMPR	600A	15A		XXX
	E12A	1PBE1238A	MC5056	CROSS-TIE DUCT WORK DMPR	600A	15A		XXX
	E12A	1PBE1239A	MC5024	FUEL HAND AREA BYPASS VLV	600A	15A		XXX
	E12B	1PBE1258A	C3621	EMER DG 1 IMMERSION HTR	225A	30A		XXX
	E12B	1PBE1261A	MP1471	EMER DG 1 SOAK PUMP	225A	15A		XXX
	E12B	APBE1257A	MP0081	DO XFER PUMP 1	225A	15A		XXX
	E12B	APBE1267A	MP1591	FUEL OIL BOOSTER PUMP 1	225A	15A		XXX
	E12B	APBE1268A	MP173A	DO STRG TK AREA SUMP PMP	225A	15A		XXX
	E12B	APBE1269A	WE1091	DO PMP HSE ELEC UNIT HTR	225A	15A		XXX
	E12B	APBE1270A	X3021	LTG XFMR DO PMP HOUSE	225A	15A		XXX
	E12B	APBE1289A	MP1473	EDG 1 AC LUBE OIL PUMP	225A			XXX
D	E12B	APBE1289B						
	E12C	1PBE1210A	E12D	480VAC MCC	225A	150A		XXX
	E12C	1PBE1274A	MF0151	SW PUMP STRNR 1	225A	15A		XXX
	E12C	1PBE1280A	EF12C	480VAC MCC	225A	90A		XXX
	E12D	APBE1203A	MC0100	TRAVELING SCREEN AREA VNT	150A	30A		XXX
	E12D	APBE1204A	MF15401	BACKUP SW PUMP STRAINER	150A	15A		XXX
	E12F	APBE1299A	MC0111	EMER DG AIR COMPSR 1	225A	30A		XXX
	E16A	1PBE1611A	RE4598AA	STA VENT EFF HI RAD MON	600A	15A		XX

D = Deletion
C = Correction

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Appendix R
Compliance Assesment Report

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
	E16A	1PBE1612A	RE4598AB	STA VENT EFF HI RAD MON	600A	15A		XXX
	E16B	1PBE1613A	RE4597AA	CTMT POST ACC HI RAD MON	250A	15A		XXX
	E16B	1PBE1614A	RE4597AB	CTMT POST ACC HI RAD MON	250A	15A		XXX
	EF12C	3PBEF124A	MF0153	SW PMP STRNR 3	90A	15A		XXX
	EF12C	CPBEF123A	MP0060	JOCKEY FIRE PUMP	90A	20A		XXX
	F1	BPBF113A	F13	480 VAC MCC	1600A	600A		XXX
	F11A	2PBF1102A	MRE5328	CTRM VENT SYS VACM PMP 2	600A	15A		XXX
	F11A	2PBF1103A	MV4907	CTRM STANDBY COND UNIT	600A	15A		XXX
	F11A	2PBF1109A	MC0622	H2 DILUTION SYS BLWR 2	600A	70A		XXX
	F11A	2PBF1110A	MV5065	CTMT H2 PURGE LINE 2 VLV	600A	15A		XXX
	F11A	2PBF1113A	MC0562	CTMT RECIRC FAN 2	600A	150A		XXX
D	F11A	2PBF1113B						
	F11A	2PBF1121A	MVCF02A	CF TANK 2 SAMPLE VALVE	600A	15A		XXX
D	F11A	2PBF1121B						
	F11A	2PBF1123A	MVCF05A	CF TANK 2 VENT VALVE	600A	15A		XXX
D	F11A	2PBF1123B						
	F11A	2PBF1125A	MV2736	PRZR SPRAY LINE ISO VLV	600A	15A		XXX
	F11A	2PBF1128A	MV02408	RC PRZR SAMPLE VLV 2	600A	15A		XXX
	F11A	2PBF1133A	MV1338	CC CRD BOOST PMP SUCT VLV	600A	15A		XXX
	F11A	2PBF1140A	MV2000	CTMT ISO VALVE PENET 71A	600A	15A		XXX
	F11A	2PBF 144A	MV2002	CTMT ISO VALVE PENET 73A	600A	15A		XXX
	F11A	2PBF1180A	MV5075	CTMT VACUUM RELIEF VALVE	600A	15A		XXX
	F11A	2PBF1181A	MV5076	CTMT VACUUM RELIEF VALVE	600A	15A		XXX
	F11A	2PBF1182A	MV5077	CTMT VACUUM RELIEF VALVE	600A	15A		XXX
	F11A	2PBF1183A	MV5078	CTMT VACUUM RELIEF VALVE	600A	15A		XXX
	F11A	2PBF1184A	MV5079	CONTROL VACUUM RELIEF VLV	600A	15A		XXX
	F11A	BPBF1114A	X4901	CTMT LTG XFMR	600A	70A		XXX
D	F11A	BPBF1114B						
	F11A	BPBF1115A	BSWX7901	CTMT LTG DISC SWCH	600A	150A		XXX
	F11A	BPBF1115B						
	F11A	BPBF1116A	X5701	CTRM & AUX BLDG LTG XFMR	600A	50A		XXX
	F11B	2PBF1138A	MV2012B	CTMT NORM SUMP ISO VLV	225A	15A		XXX
	F11B	2PBF1160A	MV06248	CTMT ISO VALVE PENET 72	225A	15A		XXX
	F11B	2PBF1176A	MV1567B	CC IN ISO VALVE 2 TO CRD	225A	15A		XXX
	F11B	2PBF1186A	MV5262	CTRM EMER VNT FN 2 IN VLV	225A	15A		XXX
	F11B	BPBF1152A	MP0412	PRI WATER XFER PUMP 2	225A	150A		XXX
	F11C	2PBF1151A	MV5037	CTMT H2 DILUT OUT ISO VLV	225A	15A		XXX
	F11D	2PBF1117A	MV0601	MN FW 2 ISOLATION VALVE	225A	100A		XXX
	F11D	2PBF1145A	WF60	H2 PURGE SYSTEM FILTER	225A	15A		XXX
	F11D	2PBF1153A	MP892A	ECCS SUMP PUMP 2A	225A	30A		XXX
	F11D	2PBF1154A	MP892B	ECCS SUMP PUMP 2B	225A	30A		XXX
	F11D	2PBF1163A	MV5423	ECCS RM 113 CLR 3 OUT VLV	225A	15A		XXX
	F11D	2PBF1164A	MV5068	CTMT H2 PURGE FN 2 IN VLV	225A	15A		XXX
	F11D	2PBF1165A	MV5424	ECCS RM 115 CLR 2 OUT VLV	225A	15A		XXX
	F11D	2PBF1166A	MV5425	ECCS RM 115 CLR 1 OUT VLV	225A	15A		XXX
	F11D	2PBF1178A	MV5441	ECCS RM 115 HVAC ISO VLV	225A	15A		XXX
	F11D	2PBF1179A	MV5442	ECCS RM 115 HVAC ISO VLV	225A	15A		XXX
	F11D	2PBF1185A	MV0830	DHR CLR 2 OUT XOVER	225A	15A		XXX
	F11D	BPBF1107A	MVMU12B	MU FLT 2 IN VLV	225A	15A		XXX
	F11D	BPBF1169A	MP0382	BA PUMP 2	225A	20A		XXX
	F11D	BPBF1171A	WET721	BA ADD TANK 2 HEATER 1	225A	30A		XXX
	F11D	BPBF1172A	WET722	BA ADD TANK 2 HEATER 2	225A	30A		XXX
	F11E	BPBF1196A	F11F	480VAC MCC F11F	150A	150A		XXX
	F11F	BPBF1197A	C1710	SAMPLE PMP SPEED CTRLR	150A	15A		XXX

D = Deletion
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Appendix R
Compliance Assesment Repr

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
	F11F	BPBF1197B	MP216	SAMPLE PMP SPEED CTRLR	150A	15A		XXX
	F11F	BPBF1198A	C1709	DEMIN WTR PMP SPEED CTRLR	150A	15A		XXX
	F11F	BPBF1198B	MP217	DEMIN WTR PMP SPEED CTRLR	150A	15A		XXX
	F12A	2PBF1203A	MC0302	EMER VENT FAN 2	600A	70A		XXX
	F12A	2PBF1213A	WLB11,2,3	Power Circuit (WLB11,2,3)	600A	250A		XXX
D	F12A	2PBF1213B	WLB11,2,3	Power Circuit (WLB11,2,3)				
	F12A	2PBF1214A	WLB11,2,3	Power Circuit (WLB11,2,3)				
D	F12A	2PBF1214B	WLB11,2,3	Power Circuit (WLB11,2,3)				
	F12A	2PBF1215A	WLB11,2,3	Power Circuit (WLB11,2,3)				
D	F12A	2PBF1215B	WLB11,2,3	Power Circuit (WLB11,2,3)				
	F12A	2PBF1218A	MC5018	EMER VNT FAN DISCH DMPR 2	600A	15A		XXX
	F12A	2PBF1220A	YRF2	480VAC/125VDC RECTIFIER	600A	30A		XXX
	F12A	2PBF1221A	YRF4	480VAC/125VDC RECTIFIER	600A	30A		XXX
	F12A	2PBF1225A	MC5057	CROSS TIE DUCT WORK DMPR	600A	15A		XXX
	F12A	2PBF1226A	MV5025	FUEL HAND AREA BYPASS VLV	600A	15A		XXX
	F12A	2PBF1229A	MS0612	CTRM STANDBY COND 2 FAN	600A	30A		XXX
D	F12A	BPBF1240A	MRE2025	STA VNT STACK VACM PMP 1	600A	15A		XXX
	F12B	2PBF1258A	C3622	EMER DG 2 IMMERSION HTR	225A	30A		XXX
	F12B	2PBF1260A	MVRC02	PRZR 1 SPRAY LINE VLV	225A	15A		XXX
D	F12B	2PBF1260B						
	F12B	2PBF1261A	MP1472	EMER DG 2 SOAK PUMP	225A	15A		XXX
	F12B	BPBF1257A	MP0082	DO XFER PUMP 2	225A	15A		XXX
	F12B	BPBF1263A	MC0112	EMER DG AIR COMPSR 2	225A	30A		XXX
	F12B	BPBF1267A	MP1592	FUEL OIL BOOSTER PUMP 2	225A	15A		XXX
	F12B	BPBF1268A	MP1738	DO STRG TK AREA SUMP PMP	225A	15A		XX
	F12B	BPBF1269A	WE1092	DO PMP HSE ELEC UNIT HTR	225A	15A		XXX
	F12B	BPBF1289A	MP1474	EDG 2 AC LUBE OIL PUMP	225A			XXX
D	F12B	BPBF1289B						
	F12C	2PBF1274A	MF0152	SW PUMP STRNR 2	225A	15A		XXX
	F12C	2PBF1280A	EF12C	480VAC MCC	225A	90A		XXX
	F71	BPBF7105A	C3410	EIAC CLOSED COOLING LOOP	600A	150A		
	F71	BPBF7115A	MP2562	STA AIR CMPSR 2 LO PUMP	600A	150A		
D	F71	BPBF7115B	MP2562	STA AIR CMPSR 2 LO PUMP	600A	150A		
	Y1	1CY103A	C5762B	PROCESS & RAD MON CABINET	200A	10A	XXX	
	Y1	1CY106A	C5762E	RPS-1 CABINET	200A	15A	XXX	
	Y1	1CY111A	ASH5358A	CL2 MONITOR ASH5358A	200A	15A	XXX	
	Y1	1CY111B	ASH4863A	CL2 MONITOR ASH4863A				
	Y1	1CY111C	CFPP19Q	F/P PANERL CFPP19Q				
	Y1	1CY113A	CFP03Q	BWST INST HEAT TRACING	200A	15A	XXX	
	Y1	1CY114A	RC3701	RELAY CABINET RC3701	200A	15A	XXX	
	Y1	1CY114B	CFPP17Q	F/P PANEL				
	Y1	1CY118A	PDY5000B	PDY5000B	200A	5A	XXX	
	Y1	1CY118B	PDY5000C	PDY5000C				
	Y1	1CY118C	TY5443	TY5443				
	Y1	1CY118D	C5784A	ARTS CABINET C5784A				
	Y1	1CY119A	C3801	CTMT HYDROGEN SYS PANEL	200A	10A	XXX	
	Y1	1CY120A	RC3607	RELAY CABINET RC3607	200A	5A	XXX	
	Y1	1CY120B	RC3601	RELAY CABINET RC3601				
	Y1	1CY120C	RC3605	RELAY CABINET RC3605				
	Y1	1CY120D	YL1	YL1				
	Y1	1CY122A	CFPP10Q	CL2 ANALYZER HEAT TRACE	200A	15A	XXX	
	Y1	ACY1VMA	E16277	REMOTE VOLTMETER AT C5715	200A	2A	XXX	
	Y2	2CY203A	C5755B	PROCESS & RAD MON CABINET	200A	10A	XXX	
	Y2	2CY206A	C5755E	RPS-2 CABINET	200A	15A	XXX	
	Y2	2CY213A	ASH5358B	CL2 MONITOR ASH5358B	200A	15A	XXX	
	Y2	2CY213B	ASH4863B	CL2 MONITOR ASH4863B				
	Y2	2CY213C	CFPP20Q	F/P PANEL CFPP20Q				

D = Deletion
C = Correction

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Appendix R
Compliance Assesment Report

APPENDIX R COMPLIANCE ASSESSMENT REPORT
ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
	Y2	2CY217A	PDY5014B	PDY5014B	200A	30A	XXX	
	Y2	2CY217B	PDY5014C	PDY5014C				
	Y2	2CY217C	FTY5444	TY5444				
	Y2	2CY217D	C5784B	ARTS CABINET C5784B				
	Y2	2CY218A	C3801	CTMT HYDROGEN SYS PANEL	200A	15A	XXX	
	Y2	2CY218B	CFPP18Q	F/P PANEL CFPP18Q				
	Y2	2CY219A	RC3608	RELAY CABINET RC3608	200A	5A	XXX	
	Y2	2CY219B	RC3602	RELAY CABINET RC3602				
	Y2	2CY219C	RC3606	RELAY CABINET RC3606				
	Y2	2CY219D	YL2	YL2				
	Y2	2CY220A	CFP04Q	BWST INSTR HEAT TRACING	200A	15A	XXX	
	Y2	2CY222A	CFPP11Q	CL2 ANALYZER HEAT TRACE	200A	15A	XXX	
	Y2	BCY2VMA	E16282	REMOTE VOLTMETER AT C5715	200A	2A	XXX	
	Y3	3CY308A	C5763F	RPS-3 CABINET	200A	15A	XXX	
	Y3	3CY309A	RC3603	RELAY CABINET RC3603	200A	5A	XXX	
	Y3	3CY310A	CFP05Q	BWST HEAT TRACING	200A	15A	XXX	
	Y3	3CY312A	C5784C	ARTS CABINET	200A	15A	XXX	
	Y3	3CY313A	C5760A	CTRM CABINET	100A	10A	XXX	
C	Y3	4CY414A	C5756G	CTRM CABINET	100A	10A	XXX	
	Y3	ACY3VMA	E16281	REMOTE VOLTMETER AT C5715	200A	2A	XXX	
	Y4	4CY408A	C5756F	RPS-4 CABINET	200A	15A	XXX	
	Y4	4CY409A	C5764A	SEISMIC RECORDING SYS	200A	3A	XXX	
	Y4	4CY410A	RC3604	RELAY CABINET RC3604	200A	5A	XXX	
	Y4	4CY411A	CFP06Q	BWST HEAT TRACE CABINET	200A	15A	XXX	
	Y4	4CY412A	C5784D	ARTS CABINET C5784D	200A	30A	XXX	
	Y4	BCY4VMA	E16278	REMOTE VOLTMETER AT C5715	200A	2A	XXX	
	YAU	ACYAU20A	C4603	CRD MISC TRIP CONFIRM 2	600A	30A	XXX	
	YAU	ACYAU21A	C4801Y	CRD MISC API & LOGIC 2	600A	30A	XXX	
	YAU	ACYAU22A	C1702	PANEL	600A	30A	XXX	
	YAU	ACYAU23A	C4801H	CRD MISC TRANSFER	600A	30A	XXX	
	YAU	ACYAU24A	C4101	H2 DETECTOR CABINET	600A	30A	XXX	
	YAU	ACYAU25A	C5761B	ALT ICS Y BUS FEED	600A	30A	XXX	
C	YAU	ACYAU27A	C2401	MFPT 1-1 CTRL	600A	30A	XXX	
	YAU	ACYAU28A	C5764D	ENVIRONMENTAL MONITOR SYS	600A	30A	XXX	
	YAU	ACYAU29A	R3004	RACK	600A	30A	XXX	
	YAU	ACYAU29B	R3002	RACK				
	YAU	ACYAU29C	R3003	RACK				
C	YAU	ACYAU29E	FAT6859	RACK				
	YAU	ACYAU30A	C5765E	PROCESS & RADIATION MON	600A	30A	XXX	
	YAU	ACYAU31A	C3403	STATION AIR COMPRESSOR 1	600A	30A	XXX	
	YAU	ACYAU32A	C5715	DC & INSTR AIR BKR IND	600A	30A	XXX	
	YAU	ACYAU33A	C6710	MOTOROLA TRANSCEIVERS	600A	30A	XXX	
	YAU	ACYAU34A	C3002	DIESEL FIRE PUMP CTRL	600A	30A	XXX	
	YAU	ACYAU35A	RC3717	RELAY CABINET	600A	30A	XXX	
	YAU	ACYAU35B	RC3715	RELAY CABINET				
	YAU	ACYAU35C	RC1760	RELAY CABINET				
	YAU	ACYAU36A	RC3005	RELAY CABINET	600A	30A	XXX	
	YAU	ACYAU36B	RC3003	RELAY CABINET				
	YAU	ACYAU36C	RC3001	RELAY CABINET				
	YAU	ACYAU37A	RC4311	RELAY CABINET	600A	30A	XXX	
	YAU	ACYAU38A	C3610	SUPPLEMENTARY PANEL	600A	30A	XXX	
	YAU	ACYAU39A	C5722	MAIN CTRL PANEL	600A	30A	XXX	
	YAU	ACYAU40A	RC2404	RELAY CABINET	600A	30A	XXX	
	YAU	ACYAU40B	R2204	LOCAL ANNUNCIATOR				
	YAU	ACYAU41A	RC2825	RELAY CABINET	600A	30A	XXX	
	YAU	ACYAU41B	R1801	RACK				
	YAU	ACYAU42A	C4705	FIRE PROTECTION SYSTEM	600A	30A	XXX	
D	YAU	ACYAU42B	C4706	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42C	C5785A	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42D	FPDS8627A	FIRE PROTECTION SYSTEM				

D = Deletion
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Appendix R
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ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FDR	LOAD	YES	NO
	YAU	ACYAU42E	C5401	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42F	C5402	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42G	C5403	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42H	C5215	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42K	JT4801	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42L	JT4908	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42M	JT4909	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42N	C57858	FIRE PROTECTION SYSTEM				
	YAU	ACYAU42P	C4709	FIRE PROTECTION SYSTEM				
	YAU	ACYAU43A	C5718	MAIN CTRL BOARD	600A	30A	XXX	
	YAU	ACYAU44A	C5721	FEEDWATER PANEL	600A	30A	XXX	
	YAU	ACYAU45A	C5771	CTRL ROOM RECEPTACLE	600A	30A	XXX	
	YAU	ACYAU46A	C5765F	PROCESS & RADIATION MON	600A	30A	XXX	
	YAU	ACYAU46B	C5781	PROCESS & RADIATION MON				
	YAU	ACYAU47A	C5719	CRT & RECORDERS	600A	30A	XXX	
	YAU	ACYAU48A	C5770	COMP UNIT A,CPU,PRINTER	600A	30A	XXX	
	YAU	ACYAU49A	C5708	MAIN CTRL BOARD	600A	30A	XXX	
	YAU	ACYAU49B	C5706	XI-7003 (AT C5701)	600A	20A	XXX	
	YAU	ACYAU50A	C5772C	COMPUTER MAIN FRAME	600A	30A	XXX	
	YAU	ACYAU50B	C5772F	COMPUTER MAIN FRAME				
D	YAU	ACYAU51A	C5753C	LIOP 1 FANS	600A	30A	XXX	
	YAU	ACYAU52A	C5751C	LIOP 2 FANS	600A	30A	XXX	
	YAU	ACYAU53A	C5720	MAIN CTRL BOARD	600A	30A	XXX	
	YAU	APYAU02A	Y4501	FUSE PANEL Y4501	600A	100A	XXX	
	YAU	APYAU04A	C5765A	PROCESS & RADIATION MON	600A	100A	XXX	
	YAU	APYAU05A	Y3601	FUSE PANEL Y3601	600A	100A	XXX	
	YAU	APYAU08A	C5754F	STATION ANNUNCIATOR	600A	60A	XXX	
	YAU	APYAU09A	C5758A	BUFFER CABINET	600A	60A	XXX	
	YAU	APYAU11A	U500	MAIN COMMUNICATION BOX	600A	60A	XXX	
	YAU	APYAU12A	C5758C	MISC ELECTRONIC CTRL CAB	600A	60A	XXX	
	YAU	APYAU13A	C5754K	EPF MULTIPLEXER CABINET	600A	60A	XXX	
	YAU	APYAU14A	TSC	TSC DATALINK UI4629	600A	60A	XXX	
	YAU	APYAU14B	JT5708	TSC DATALINK				
	YAU	APYAU14C	JT5707	TSC DATALINK				
	YAU	APYAU15A	C5758B	DIAGNOSTIC CABINET	600A	60A	XXX	
	YAU	APYAU16A	C5772E	COMPUTER MAINFRAME	600A	60A	XXX	
	YAU	APYAU17A	C5772B	COMPUTER MAINFRAME	600A	60A	XXX	
	YAU	APYAU18A	C5772A	COMPUTER MAINFRAME	600A	60A	XXX	
	YBU	BCYBU19A	C1702	PANEL	600A	60A	XXX	
	YBU	BCYBU20A	C4301	GEN VOLT REG CAB	600A	30A	XXX	
	YBU	BCYBU21A	C3303	GEN COOL SYS CAB	600A	30A	XXX	
	YBU	BCYBU23A	C5715	DC & INSTR BKR STATUS IND	600A	30A	XXX	
	YBU	BCYBU23B	C5718	DC & INSTR BKR STATUS IND	600A	30A	XXX	
	YBU	BCYBU24A	C4801Y	CRD MCS API & LOGIC 1	600A	30A	XXX	
	YBU	BCYBU25A	C4801K	CRD MCS TRANSFER	600A	30A	XXX	
D	YBU	BCYBU26A	C2301	MFPT 1-2 CTRL	600A	30A	XXX	
	YBU	BCYBU27A	C4606	CRD MCS TRIP CONFIRM 1	600A	30A	XXX	
	YBU	BCYBU28A	C5706	CRD MCS GROUP METERS	600A	30A	XXX	
	YBU	BCYBU29A	C5777	COMP STA,VIDEO & PRINT B	600A	30A	XXX	
	YBU	BCYBU30A	C5301	CROSS WATT HR METER CAB	600A	30A	XXX	
	YBU	BCYBU31A	C5720	MAIN CTRL BOARD	600A	30A	XXX	
	YBU	BCYBU31B	C5719	MAIN CTRL BOARD				
	YBU	BCYBU32A	C5770	COMP DISC UNIT B, CPU B	600A	30A	XXX	
	YBU	BCYBU33A	C5757C	TURBINE INSTR CABINET	600A	30A	XXX	
	YBU	BCYBU34A	C5752	COMPUTER LAIP	600A	30A	XXX	
	YBU	BCYBU35A	C5757D	COMPUTER BUTT CTRM CAB	600A	30A	XXX	
	YBU	BCYBU36A	C3404	STATION AIR COMPRESSOR 2	600A	30A	XXX	
	YBU	BCYBU37A	RC4410	RELAY CABINET	600A	30A	XXX	
	YBU	BCYBU37B	RC4401	RELAY CABINET				
	YBU	BCYBU37C	RC2304	RELAY CABINET				
	YBU	BCYBU37D	FL13709	RELAY CABINET				
	YBU	BCYBU38A	C5754H	LOAD FREQ CTRL	600A	30A	XXX	

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Appendix R
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ASSOCIATED CIRCUIT EVALUATION SUMMARY

	COMMON POWER SOURCE	CIRCUIT	COMPONENT	DESCRIPTION	BKR/FUSE RATING		BKR/FUSE COORD ?	
					INC FOR	LOAD	YES	NO
	YBU	BCYBU39A	C5723	DIGITAL FREQ IND	600A	30A	XXX	
D	YBU	BCYBU40A	C4601C	COMPUTER RAIP	600A	30A	XXX	
	YBU	BCYBU41A	RC1761	RELAY CABINET	600A	30A	XXX	
	YBU	BCYBU42A	RC3006	RELAY CABINET	600A	30A	XXX	
	YBU	BCYBU42B	RC3004	RELAY CABINET				
	YBU	BCYBU42C	RC3002	RELAY CABINET				
	YBU	BCYBU43A	RC3716	RELAY CABINET	600A	30A	XXX	
	YBU	BCYBU43B	RC3718	RELAY CABINET				
	YBU	BCYBU44A	C3611	SUPPLEMENTARY PANEL	600A	30A	XXX	
	YBU	BCYBU45A	C5722	MAIN CTRL PANEL	600A	30A	XXX	
D	YBU	BCYBU46A	C5105	COMB BUTT VLV LOCAL CAB	600A	30A	XXX	
	YBU	BCYBU47A	RC2826	RELAY CABINET	600A	30A	XXX	
	YBU	BCYBU48A	C5764B	VIBRATION ACOUSTIC MON	600A	30A	XXX	
	YBU	BCYBU48B	C5764C	VIBRATION ACOUSTIC MON				
	YBU	BCYBU49A	C5721	FEEDWATER PANEL	600A	30A	XXX	
	YBU	BCYBU50A	C5761B	ICS X BUS	600A	30A	XXX	
	YBU	BCYBU52A	C5754F	STATION ANNUNCIATOR	600A	30A	XXX	
	YBU	BCYBU52B	JT5712	COMM DATA TRANSMISSION				
	YBU	BCYBU52C	JT5713	COMM DATA TRANSMISSION				
	YBU	BCYBU53A	C5708	MAIN CTRL BOARD	600A	30A	XXX	
	YBU	BCYBU53B	C5706	XI-7004,XS-7000(AT C5701)	600A	20A	XXX	
	YBU	BPYBU02A	C5756C	PROCESS & RADIATION MON	600A	100A	XXX	
	YBU	BPYBU03A	Y4502	FUSE PANEL Y4502	600A	100A	XXX	
	YBU	BPYBU08A	C5757B	EHC SYSTEM	600A	60A	XXX	
	YBU	BPYBU09A	C5758F	MISC ELECTRONIC CTRL CAB	600A	60A	XXX	
	YBU	BPYBU11A	U500	MAIN COMMUNICATION BOX	600A	60A	XXX	
	YBU	BPYBU12A	C5772G	COMPUTER MAINFRAME	600A	60A	XXX	
	YBU	BPYBU13A	C5772G	COMPUTER MAINFRAME	600A	60A	XXX	
	YBU	BPYBU14A	C5772D	COMPUTER MAINFRAME	600A	60A	XXX	
D	YBU	BPYBU15A	C5753	COMPUTER LIOP 1	600A	60A	XXX	
D	YBU	BPYBU16A	C5753	COMPUTER LIOP 1	600A	60A	XXX	
	YBU	BPYBU17A	C5751	COMPUTER LIOP 2	600A	60A	XXX	
	YBU	BPYBU18A	C5751	COMPUTER LIOP 2	600A	60A	XXX	
	YE2	1PYE201A	MV5011A	CTMT AIR SMPL ISO VLV	150A	15A	XXX	
	YE2	1PYE202A	MV5011B	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
D	YE2	1PYE202B						
	YE2	1PYE203A	MV5011C	CTMT AIR SMPL ISO VLV	150A	15A	XXX	
	YE2	1PYE204A	MV5011D	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
D	YE2	1PYE204B						
	YE2	1PYE205A	MV5011E	CTMT AIR SMPL RET ISO VLV	50A	15A	XXX	
	YE2	1PYE206A	MC5000A	EMER VNT SYS MOD DMPR 1	50A	15A	XXX	
	YE2	1PYE207A	MC5000B	EMER VNT SYS MOD DMPR 2	50A	15A	XXX	
	YF2	2PYF201A	MV5010A	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
D	YF2	2PYF201B						
	YF2	2PYF202A	MV5010B	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
	YF2	2PYF203A	MV5010C	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
D	YF2	2PYF203B						
	YF2	2PYF204A	MV5010D	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
	YF2	2PYF205A	MV5010E	CTMT AIR SMPL ISO VLV	50A	15A	XXX	
	YF2	2PYF206A	MC5014A	EMER VNT SYS MOD DMPR 3	50A	15A	XXX	
	YF2	2PYF207A	MC5014B	EMER VNT SYS MOD DMPR 4	50A	15A	XXX	

D = Deletion
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AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
1N	1PD121A	DBC1PN	BATTERY CHARGER	1600	A6Y1600-4	E6/3	800	A6Y800-4	E6/3	YES	1
1N	1PD131A	DC MCC 1	DC MCC	N/A	NONE		1600	A6Y1600-4	E7	YES	1
1N	1PD134A	DBC1N	BATTERY CHARGER	1600	A6Y1600-4	E6/3	800	A6Y800-4	E6/3	YES	1
1P	1PD103A	DBC1P	BATTERY CHARGER	1600	A6Y1600-4	E6/3	800	A6Y800-4	E6/3	YES	1
1P	1PD104A	DC MCC 1	DC MCC	N/A	NONE		1600	A6Y1600-4	E7	YES	1
1P	1PD105A	DBC1PN	BATTERY CHARGER	1600	A6Y1600-4	E6/3	800	A6Y800-4	E6/3	YES	1
2N	2PD221A	DBC2PN	BATTERY CHARGER	1600	A6Y1600-4	E6/4	800	A6Y800-4	E6/4	YES	1
2N	2PD231A	DC MCC 2	DC MCC	N/A	NONE		1600	A6Y1600-4	E7	YES	1
2N	2PD234A	DBC2N	BATTERY CHARGER	1600	A6Y1600-4	E6/4	800	A6Y800-4	E6/4	YES	1
2P	2PD203A	DBC2P	BATTERY CHARGER	1600	A6Y1600-4	E6/4	800	A6Y800-4	E6/4	YES	1
2P	2PD204A	DC MCC 2	DC MCC	N/A	NONE		1600	A6Y1600-4	E7	YES	1
2P	2PD205A	DBC2PN	BATTERY CHARGER	1600	A6Y1600-4	E6/4	800	A6Y800-4	E6/4	YES	1
C1	(1PD1P05A)	AC110	LARGEST CONT PWR FUSE	70	A2Y70-3	E640A/1A	30	A6Y30-1	E5-44, E64B/1A	YES	1
C1	1PAC108A	CD	4.16KV XFER SWGR	1200	50 DHP	E3	1200	50 DHP	E3	YES	1,20
C1	CABLE BUS	D2	4.16KV SWGR	1200	50 DHP	E1, E3	2000	50 DHP	E22	ACC	1,20
C2	(APDAN07A)	VARIOUS	LARGEST CONT PWR FUSE	70	A2Y70-3	E642A/3A	30	A6Y30-1	E5-51	YES	1
C2	APAC201A	P180	BACKUP SWP	1200	50 DHP	E3	1200	50 DHP	E3	YES	1
C2	APXAC01A	BUS A	POWER CABLE	N/A	NONE	E1	N/A	NONE	E2008	ACC	4,20
C2	CABLE BUS	XAC	BUS TIE XFMR BACKFEED	2000	50 DHP	E1	2000	50 DHP	E3	ACC	4,20
C3615	(1PD1P09A)	VARIOUS	VAR, LARGEST LOAD (D1P)	70	A2Y70-3	E640/1A	35	A6Y35-1	E64B/1C, E39-6/3	YES	1
C3615	(1PY105A)	EDG HVAC	VAR, LGST LOAD USED (Y1)	15	A25X15	E641/1A	6	A2Y6-1(A)	E64B/5,E559,E39/6	ACC	1,13
C3615	(3PY305A)	EDG HVAC	VAR LARGEST LOAD (Y3)	15	A25X15	E641/3A	6	A2Y6-1(A)	E641/3A, E39-6	ACC	5,13
C3615	(ACV1131B)	EV1131	FP DSL DAY TNK VLV (D1P)	70	A2Y70-3(A)	E64B/1C	2	A6Y2-1(A)	E64B/11B	YES	5
C3615	(ACV1131G)	RC3007	FP DSL DAY TNK VLV (Y1)	15	A25X15	E641A/1A	2	A6Y2-1(A)	E64B/11B	YES	5
C3616	(2PD2P09A)	VARIOUS	VAR, LARGEST LOAD (D2P)	70	A2Y70-3(A)	E640A/2A	35	A6Y35-1	E64B/2C, E39-6/3	YES	1
C3616	(2PY205A)	EDG HVAC	VAR, LARGEST LOAD (Y2)	15	A25X15	E641/2A	6	A2Y6-1(A)	E64B/5, E559, E39-6	ACC	1,13
C3616	(4PY405A)	EDG HVAC	VAR,LARGEST LOAD USED(Y4)	15	A25X15	E641A/4A	6	A2Y6-1(A)	E39-6, E641/3A	ACC	5,13
C3617	(1CGD102C)	VARIOUS	DG EXCITER (D1P)	70	A2Y70-3(A)	E640A/1A	35	A2Y35-1(A)	M180-10,31 E64B/1G,C	YES	1
C3618	(2CGD202C)	VARIOUS	DG EXCITER (D2P)	70	A2Y70-3(A)	E640A/2A	35	A2Y35-1(A)	M180-10, E64B/2G,C	YES	1
C3621	(1CGD102D)	VARIOUS	DG GOV & VLTG CNTRL (D1P)	70	A2Y70-3(A)	E640A/1A	30	A2Y30-1(A)	M189-10, E64B/1C	YES	1
C3622	(2CGD202D)	VARIOUS	DG GOV & VLTG CNTRL (D2P)	70	A2Y70-3	E640A/2A	30	A2Y30-1(A)	M180-10, E64B/2C	YES	1
C3628	(1CY108B)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/1A	1	A6Y1-1(A)	M544-14, M530-321	YES	2
C3629	(2CY208B)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/2A	1	A6Y1-1(A)	M530-327, M530-321	YES	2
C3630	(1CY108A)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/1A	5	A2Y5-1(A)	E578/1, M544-5, -6	ACC	1,14
C3630	(2CY208A)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/2A	5	A2Y5-1(A)	M544-5, -6, E578-1	ACC	1,14
C3645	(1CY104AA)	VARIOUS	VAR, LARGEST LOAD (Y1A)	20	A25X20	E908A	NONE	NONE	E2010, M324AQ-325	YES	1,9
C4602	(2CY208AB)	VARIOUS	VAR, LARGEST LOAD USED	10	A25X10	E909A	NONE	NONE	E1049/3,4,M321AQ-68	YES	1,9
C4625	(2CY204AA)	VARIOUS	VAR, LARGEST LOAD (Y2A)	20	A25X20	E909A	NONE	NONE	E2009, M324AQ-326	YES	1,9
C4808	(1CY108AB)	VARIOUS	VAR, LARGEST LOAD USED	10	A25X10	E908A	NONE	NONE	E1049/1,2,M321AQ-68	YES	1,9
C5705	(2CY211B)	VARIOUS	VAR, LRGST LOAD USED (Y2)	10	A25X10	E641A/2A	2	A2Y2-1(A)	E577/9, E574/8	YES	7
C5705	(2CY419A)	VARIOUS	HIS/LTG LGST LOAD (Y4)	3	A25X3	E641A/4A, DCN 1362	2	A2Y2-1(A)	E577/9, E574/8	ACC	1,9,18
C5706	(ACYAU49B)	VARIOUS	HIS/LTG LGST LOAD (YAU)	20	A2Y20-1	E643/2	2	A2Y2-1(A)	E574/8	YES	6
C5706	(BCYBU53B)	VARIOUS	HIS/LTG LGST LOAD (YBU)	20	A2Y20-1	E643/4	2	A2Y2-1(A)	E574/8	YES	6
C5708	(1CY112C)	VARIOUS	VAR, LARGEST LOAD USED	10	A25X10	E641/1A	2	A2Y2-1(A)	E574/8	YES	7
C5709	(2CY211C)	VARIOUS	LARGEST LOAD	10	A25X10	E641A/2A	2	A2Y2-1(A)	E574/8	YES	7
C5715	(ACYAU32A)	VARIOUS	VAR, LARGEST LOAD USED	20	A2Y20-1	E643/1	2	A6Y2-2	E567/10,2, E542	YES	6

SYMBOLS; ACC = ACCEPTABLE (A) = ASSUMED TYPE

A = Added to FADR

Blank = Same as CAR Rev. 5

C = Correction

DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	C5715	(BCYBU23A)	VARIOUS	VAR, LARGEST LOAD USED	20	A2Y20-1	E643/3	2	A6Y2-2	E567/11,2, E542	YES	6
	C5716	(1CY112A)	VARIOUS	LARGEST LOAD, HPI FLOW	10	A25X10	E641A/1A	2	A2Y2-1(A)	E577/12, E48B/13	YES	1
	C5716	(2CY211A)	VARIOUS	LARGEST LOAD, HPI FLOW	10	A25X10	E641A/2A	2	A2Y2-1(A)	E577/13 BOM642544202	YES	1
	C5717	(1CY116A)	VARIOUS	CTRM SW IND LIGHTS	5	A25X5	E641A/1A	2	A2Y2-1(A)	E576/6, FU LIST	ACC	5,18
	C5717	(2CY212A)	VARIOUS	CTRM SW IND LIGHTS	3	A25X3	E641A/2A	2	A2Y2-1(A)	E568/7, FU LIST	ACC	5,18
	C5718	(ACYAU43A)	VARIOUS	CTRM SW IND LIGHTS	20	A2Y20-1	E643A/2	2	A2Y2-1(A)	E569/7, FU LIST	YES	6
	C5718	(BCYBU23B)	VARIOUS	CTRM SW IND LIGHTS	20	A2Y20-1	E643A/3	2	A2Y2-1(A)	E569/6, E568/36	YES	6
	C5721	(ACYAU44A)	VARIOUS	VAR, LARGEST LOAD USED	20	A2Y20-1	E643A/2	3	A2Y3-1(A)	E571/5, FL, E468/33C	YES	1
	C5721	(BCYBU49A)	VARIOUS	VAR, LARGEST LOAD USED	20	A2Y20-1	E643A/4	3	A2Y3-1(A)	E571/5,FL,E468/33C	YES	6
	C5755C	(2CD2P19A)	VARIOUS	VAR, SFAS CH 2 SV's (D2P)	30	A2Y30-1	E640A/2A	2	A2Y2-1(A)	E17B, E761, E540	YES	1
	C5755E	(2CY206A)	VARIOUS	VAR, LRGST LOAD USED NI	5	A25X5	E641A/2A	5	A2Y5-1(A)	E731A/3,M530-278,F.L	ACC	1,9,19
	C5756D	(2CD2P18A)	VARIOUS	VAR, SFAS CH 2 SV's (D2P)	30	A2Y30-1	E640A/2A	2	A2Y2-1(A)	E17B, E761, E628/4	YES	1
	C5762A	(1CY121A)	VARIOUS	VAR, SFRCS RLY CH1 (Y1)	5	A25X5(A)	E641A/1B	2	A2Y2-1(A)	7749-E30-132, SF003	ACC	1,17
	C5762A	(1PD1P11A)	VARIOUS	VAR, SFRCS RLY CH 3 (D1P)	20	A2Y20-1	E640A/1A, DCN 38	2	A2Y2-1(A)	E468/1A	YES	1
	C5762C	(1CD1P18A)	VARIOUS	VAR, SFAS CH 1 SV's (D1P)	30	A2Y30-1	E640A/1A	2	A2Y2-1(A)	E17B, E761, E508/15A	YES	1
	C5763B	1CY112B	VARIOUS	PAM/RAD MON	10	A25X10	E641A/1A, DCN 723	1	A2Y1-1(A)	E528/68	YES	7
	C5763D	(1CD1P19A)	VARIOUS	VAR, SFAS CH 1 SV's (D1P)	30	A2Y30-1	E640A/1A	2	A2Y2-1(A)	E17B,761,546,E30-13	YES	1
	C5792	(2CY221B)	VARIOUS	VAR, SFRCS RLY CH 2 (Y2)	5	A25X5(A)	E641/2B, DCN 20	2	A2Y2-1(A)	SF003	ACC	1,17
	C5792	(2PD2P11A)	VARIOUS	VAR, SFRCS RLY CH 4 (D2P)	20	A25X20(A)	E640A/2A, DCN 39	2	A2Y2-1(A)	E468/1F, SF003	YES	1
	C5798	(2CY207AA)	VARIOUS	EXTENDED RANGE P	15	A25X15	E909A	1	A2Y1-1(A)	E1051, E1009	YES	1
	C5798	(2CY209AA)	VARIOUS	VAR, LARGEST LOAD USED	10	A25X10	E909A	3	A2Y3-1(A)	E1009,E1051/2	ACC	5,15
	C5799	(1CY107AA)	VARIOUS	EXTENDED RANGE P	15	A25X15	E908A	1	A2Y1-1(A)	E1050, E1010	YES	1
	C5799	(1CY109AA)	VARIOUS	VAR, LARGEST LOAD USED	10	A25X10(A)	E908A	3	A2Y3-1(A)	E1050, E1010	ACC	5,15
	C6708	(1CY104A)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/1A	10	A2Y10-1(A)	M410-550,E801,E2008	ACC	1,12
	C6709	(2CY204B)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/2A	10	A2Y10-1(A)	M410-551,E801,E2008J	ACC	1,12
	C6714	(1CY104B)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/1A	1.6 SLO	218/239	NOTE 10 M410G-25,6,7	ACC	1,12
	C6715	(2CY204A)	VARIOUS	VAR, LARGEST LOAD USED	15	A25X15	E641A/2A	1.6 SLO	218/239	NOTE 10,E2008(J)	ACC	1,12
	CDE-11B1	(1CY117C)	VARIOUS	CF01B IND LIGHTS	5	A25X5	E641/1A	3	A2Y3-1(A)	E286/1, E33-15-3	ACC	7,16
	CDE-11B2	(1CY117D)	VARIOUS	CONT PWR TO DH12 INTLK	5	A25X5	E641A/1A	3	A6Y3-1	E286/2,528/24D,33-16	ACC	7,16
	CDE-12A1	(1CD1P20A)	VARIOUS	LARGEST LOAD (AFWP GOV)	30	A2Y30-1	E640A/1A	6	A6Y6-1	E289/1,438/11,33-19	YES	1
	CDE-12A2	(1CD1P20C)	VARIOUS	LARGEST LOAD	30	A2Y30-1	E640A/1A	SPARE	NONE	E289/2 E33-82	YES	7
	CDF-11A1	(2CY214C)	VARIOUS	CF01A IND LIGHTS	5	A6Y5-1	E641A/2A	3	A6Y3-1	E294/1, E33-21	ACC	5
	CDF-11C	(2CD2P20B)	VARIOUS	LARGEST LOAD SW1383	30	A2Y30-1	E640A/2A	3	A6Y3-1	E296,E33-24,E448/68	YES	1
	CDF-11D	(2CD2P20D)	VARIOUS	LARGEST LOAD	30	A2Y30-1	E640A/2A	3	A6Y3-1	E297, E33-25	YES	7
	CDF12A-1	(2CD2P20A)	VARIOUS	LARGEST LOAD (AFWP GOV)	30	A2Y30-1	E640A/2A	6	A6Y6-1	E298/1,33/26,438/11B	YES	1
	D1	2PAD108A	CD	4.16KV XFER SWGR	1200	50 DHP	E3	1200	50 DHP	E3	YES	1,20
	D1N	1CD1N16A	ZC6459	MDFP CONTROL VLV POSITION	400	A2Y400-4(A	E7	10	A2Y10-1	E640A/3A	YES	5
	D1N	3CD1N15A	RC3603	RELAY CABINET RC3603	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/3A	YES	2
A	D1N	3PD1N03A	YRF3	RECTIFIER YRF3	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/3A	YES	1,26
	D1N	3PD1N05A	C1	C1 CONTROL POWER (ALT)	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/3A	YES	1
	D1N	3PD1N07A	E1	E1 CONTROL POWER	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/3A	YES	1
	D1N	3PD1N09A	C3615	EDG1-1 PANEL (ALT)	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/3A	YES	2
	D1N	3PD1N14A	C4806	CRD BKR D SHUNT TRIP CKT	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/3A	YES	2
A	D1N	APD1N04A	DAN	125VDC DIST PANEL	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/3A	YES	1
A	D1NA	1PD135A	MS106	AFPT 1 MS IN ISOL VLV	200	A2Y200-3	E7	100	A2Y100-3	E7	YES	1
	D1P	1CD1P10A	RC3706	RELAY CABINET	400	A2Y400-4(A	E7	35	A2Y35-1	E640A/1A	YES	5

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Attachment 1
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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMART

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	D1P	1CD1P13A	ZC6452	AFP #1 CTRL VLV POSITION	400	A2Y400-4(A	E7	10	A2Y10-1	E640A/1A	YES	5
A	D1P	1CD1P15A	PDIS5017	PDIS5017	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/1A	YES	2
	D1P	1CD1P17A	C5738	CONTROL PANEL	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/1A	YES	2
	D1P	1CD1P18A	C5762C	SFAS CH 1 SV's (D1P)	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1A	YES	1
	D1P	1CD1P19A	C5763D	SFAS CH 1 SV's (D1P)	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1A	YES	1
	D1P	1CD1P20A	CDE-12A-1	AFP SUCT VLV, GOV	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1A	YES	1
	D1P	1CD1P20B	RC4604	RELAY CAB RC4604	400	A2Y400-4(A	E7	NA	NONE	E640A/1A	YES	7
	D1P	1CD1P20C	CDE-12A-2	DISCONNECT SWITCH	400	A2Y400-4(A	E7	NA	NONE	E640A/1A	YES	7
	D1P	1CD1P21A	RC3601	RELAY CABINET	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1B	YES	5
	D1P	1CD1P21B	RC3701	DC CONTROL PWR TO AF6452	400	A2Y400-4(A	E7	NA	NONE	E640A/1B	YES	5
	D1P	1CD1P21C	CDE11D	CONTROL POWER TO CDE11D	400	A2Y400-4(A	E7	NA	NONE	E640A/1B	YES	5
	D1P	1CD1P21D	RC3607	CONTROL POWER TO RC3607	400	A2Y400-4(A	E7	NA	NONE	E640A/1B	YES	5
	D1P	1CD1P23B	FIS1427C	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/1B	YES	1
	D1P	1CD1P23C	FIS1432C	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	NA	NONE	E640A/1B	YES	1
	D1P	1CD1P23D	FIS1422C	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	NA	NONE	E640A/1B	YES	1
A	D1P	1CD1P24A	SS815	AFPT 1 SPEED MON C2735	400	A2Y400-4(A	E7	15	A2Y15-1(A)	E640A/1B	YES	6
	D1P	1PD1P03A	YRF1	RECTIFIER YRF1	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/1A	YES	1,26
	D1P	1PD1P05A	C1	16KV AC SWGR	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/1A	YES	1
	D1P	1PD1P06A	P43-3	C W PUMP 3	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/1A	YES	1
	D1P	1PD1P07A	E1	E CONTROL POWER	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/1A	YES	1
	D1P	1PD1P08A	P3-3	SW PUMP 3	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/1A	YES	1
	D1P	1PD1P09A	C3615	EDG1-1 PANEL (NORM)	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/1A	YES	1
	D1P	1PD1P11A	C5762A	SFRCS CH.3 LOGIC PANEL	400	A2Y400-4(A	E7	20	A2Y20-1(A)	E640A/1A, DCN 38	YES	1
	D1P	1PD1P12A	RC4801	RELAY CABINET RC4801	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1A	YES	1
	D1P	1PD1P14A	C4603	CRD BKR B SHUNT TRIP CKT	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/1A	YES	2
A	D1P	APD1P04A	DAP	125V DC DIST PANEL	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/1A	YES	1
	D1PA	1PD107A	AF3870	AFWP 1 DISCHARGE TO SG1	200	A2Y200-3	E7	100	A2Y100-3	E44B/20, E7	YES	1
	D2	(BPDBN07A)	VARIOUS	LARGEST CONT PWR FU	70	A6Y70-1	E642A/4A	30	A2Y30-1	E5-51	YES	1
	D2	BPAD210H	P241	MTR DRIVEN FEED PUMP	1200	50 DHP	E3	1200	50 DHP	E3	ACC	1,20
	D2	BPAD2DF7A	F7	SUBSTATION F7	1200	50 DHP	E3	1200	50 DHP	E3, E200B	ACC	1,20
	D2N	2PD2N17A	RC4606	DC CONT PWR TO PORV	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/4A	YES	1
	D2N	4CD2N15A	RC3604	RELAY CABINET RC3604	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/4A	YES	6
A	D2N	4PD2N03A	YRF4	RECTIFIER YRF4	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/4A	YES	1,26
	D2N	4PD2N05A	D1	D1 CONTROL POWER	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/4A	YES	1
	D2N	4PD2N07A	F1	F1 CONTROL POWER	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/4A	YES	1
	D2N	4PD2N09A	C3616	EDG1-2 PANEL (ALT)	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/4A	YES	2
	D2N	4PD2N14A	C4612	CRD BKR C SHUNT TRIP CKT	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/4A	YES	6
A	D2N	BPD2N04A	DBN	125VDC DIST PANEL	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/4A	YES	1
A	D2P	2CD2P13A	ZC6451	AFP #2 CTRL VLV ZC6451	400	A2Y400-4(A	E7	10	A2Y10-1	E640A/2A	YES	5
	D2P	2CD2P15A	PDIS5018	PDIS5018	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/2A	YES	2
A	D2P	2CD2P18A	C5756D	SFAS LOGIC ACTUATED CH2	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2A	YES	1
	D2P	2CD2P19A	C5755C	SFAS POWERED SV	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2A	YES	1
	D2P	2CD2P20A	CDF-12A-1	CONT PWR AFWP GOV	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2A	YES	1
	D2P	2CD2P20B	CDF-11C	CONT PWR SW1383	400	A2Y400-4(A	E7	NA	NONE	E640A/2A	YES	1
	D2P	2CD2P20C	RC4605	NON SSD RELAYS	400	A2Y400-4(A	E7	NA	NONE	E640A/2A	YES	7
	D2P	2CD2P20D	CDF-11D	NON SSD CONT PWR	400	A2Y400-4(A	E7	NA	NONE	E640A/2A	YES	7

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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORD-INATED	NOTES
A	D2P	2CD2P21A	RC3702	RELAY CABINET	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2B	YES	5
	D2P	2CD2P21B	RC3602	DC CONTROL POWER RCP MONI	400	A2Y400-4(A	E7	NA	NONE	E640A/2B	YES	5
	D2P	2CD2P21C	RC3608	CONTROL POWER (TO CCCW002	400	A2Y400-4(A	E7	NA	NONE	E640A/2B	YES	5
	D2P	2CD2P23A	FIS11422D	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/2B,E633B/23	YES	1
	D2P	2CD2P23B	FIS11427D	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	NA	NONE	E640A/2B,E633B/23	YES	1
	D2P	2CD2P23C	FIS11432C	FLOW SWITCH CCWS PUMP	400	A2Y400-4(A	E7	NA	NONE	E640A/2B,E633B/23	YES	1
	D2P	2CD2P24A	C2736	AFPT 2 SPEED MON	400	A2Y400-4(A	E7	5	A2Y5-1	E640A/2B	YES	2
	D2P	2PD2P03A	YRF2	RECTIFIER YRF2	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/2A	YES	1,26
	D2P	2PD2P05A	D1	D1 CONTROL POWER	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/2A	YES	1
	D2P	2PD2P06A	P43-3	CCW PUMP 3	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/2A	YES	1
	D2P	2PD2P07A	F1	F1 CONTROL POWER	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/2A	YES	1
	D2P	2PD2P08A	P3-3	SW PUMP 3	400	A2Y400-4(A	E7	60	A2Y60-1	E640A/2A	YES	1
	D2P	2PD2P09A	C3616	EDG1-2 PANEL	400	A2Y400-4(A	E7	70	A2Y70-3	E640A/2A	YES	1
	D2P	2PD2P10A	ZC6460	MDFP CTRL VLV ZC6460	400	A2Y400-4(A	E7	10	A2Y10-1	E640A/2A	YES	6
	D2P	2PD2P11A	C5792	SFRCS RELAY CABINET	400	A2Y400-4(A	E7	20	A2Y20-1	E640A/2A, DCN 39	YES	1
	D2P	2PD2P12A	RC4606	SV & MU TANK RELAYS	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2B	YES	5
	D2P	2PD2P14A	C4606	CRD BKR A SHUNT TRIP CKT	400	A2Y400-4(A	E7	30	A2Y30-1	E640A/2A	YES	5
A	D2P	BPD2P04A	DBP	125VDC DIST PANEL	400	A2Y400-4(A	E7	200	A2Y200-3	E640A/2A	YES	1
	DAN	ACDAN19A	C4603	CRD PRIMARY TRIP BKR A	200	A2Y200-3	E7	30	A2Y30-1	E642A/3A	YES	6
	DAN	ACDAN20A	XAC	BUS TIE XFMR AC	200	A2Y200-3	E7	20	A2Y20-1	E642A/3A	YES	1
	DAN	ACDAN21A	C1701	MISC WASTE EVAPORATOR PNL	200	A2Y200-3	E7	30	A2Y30-1	E642A/3B	YES	6
	DAN	ACDAN23A	C2701	BORIC ACID EVAPORATOR PNL	200	A2Y200-3	E7	30	A2Y30-1	E642A/3B	YES	6
	DAN	ACDAN25A	C3625	DG1-1 DC OIL PMP CTRL BOX	200	A2Y200-3	E7	30	A2Y30-1	E642A/3B	YES	6
	DAN	APDAN01A	C5750A	ALT GEN XFMR CABINET	200	A2Y200-3	E7	70	A2Y70-3	E642A/3A	YES	6
	DAN	APDAN02A	HA01	13.8KV SWGR A DC CTRL	200	A2Y200-3	E7	70	A2Y70-3	E642A/3A	YES	1
	DAN	APDAN02B	HAAC	13.8KV SWGR A DC CTRL	200	A2Y200-3	E7	NA	NONE	E642A/3A	YES	1
	DAN	APDAN03A	E6	480VAC USS DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/3A	YES	6
	DAN	APDAN04A	E2	480VAC USS DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/3A	YES	6
	DAN	APDAN05A	E3	480VAC USS DC CTRL (ALT)	200	A2Y200-3	E7	100	A2Y100-3	E642A/3A	YES	6
	DAN	APDAN06A	E4	480VAC USS DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/3A	YES	6
A	DAN	APDAN07A	C2	BREAKER CONT POWER	200	A2Y200-3(A	E7	70	A2Y70-3(A)	E642A/3A	YES	1
	DAN	APDAN24A	RC4802	CONT PWR (TO MUTK, SG DRN	200	A2Y200-3(A	E7	30	A2Y30-1	E642A/3B	YES	5
	DAP	ACDAP19A	RC4601	RCS COOL CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/1A	YES	6
	DAP	ACDAP21A	C3312	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	20	A2Y20-1	E642A/1B	YES	6
	DAP	ACDAP21B	C3314	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP21C	C3311	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP21D	C3310	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP21E	JT3635	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP21F	C4105	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP21G	FPS8701	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP23A	X01	START UP XFMR 1	200	A2Y200-3	E7	20	A2Y20-1	E642A/1B	YES	6
	DAP	ACDAP24A	X11	AUX XFMR 11	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP25A	C3305	GEN ISO PHASE BUS ANNUN	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP26A	RC3717	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP26B	RC2825	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP27A	RC3003	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6

SYMBOLS; ACC = ACCEPTABLE (A) = ASSUMED TYPE

A = Added to FAOR
Blank = Same as CAR, Rev. 5
C = Correction

DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	DAP	ACDAP27B	RC3001	RELAY CABINET	200	A2Y200-3	E7	N/A	NONE	E642A/1B	YES	6
	DAP	ACDAP28A	RC3715	RELAY CABINET	200	A2Y200-3(A	E7	30	A2Y30-1(A)	E642A/1B	YES	6
	DAP	ACDAP28B	RC1760	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP29A	RC4311	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP29B	RC2404	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP29C	RC3005	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	ACDAP30A	C3304	AUX BOILER CTRL PANEL	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP31A	HA03	13.8KV BRKR CTRL	200	A2Y200-3	E7	5	A2Y5-1	E642A/1B, E200B(J)	YES	6
	DAP	ACDAP31B	HA01	13.8KV BRKR CTRL	200	A2Y200-3	E7	N/A	NONE	E642A/1B, E200B(J)	YES	6
	DAP	ACDAP32A	BCE5	LTG DIST CENTER E5 BRKR	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP33A	C3610	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/1B	YES	6
	DAP	ACDAP33B	C3617	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DAP	APDAP01A	C5750A	GEN-XFMR RELAY BOARD	200	A2Y200-3	E7	70	A2Y70-3	E642A/1A	YES	6
	DAP	APDAP02A	HA01	13.8KV SWGR BUS A DC CTRL	200	A2Y200-3	E7	70	A2Y70-3	E642A/1A	YES	1
	DAP	APDAP02B	HAAC	13.8KV SWGR BUS A DC CTRL	200	A2Y200-3	E7	NA	NONE	E642A/1A	YES	6
	DAP	APDAP03A	E6	ALT 480VAC USS E6 DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/1A	YES	6
	DAP	APDAP04A	E2	480VAC USS F2 DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/1A	YES	6
	DAP	APDAP05A	E3	480VAC USS F3 DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/1A	YES	6
	DAP	APDAP06A	E4	ALT 480VAC USS E4 DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/1A	YES	6
	DAP	APDAP07A	C2	4.16KV AC SWGR	200	A2Y200-3	E7	70	A2Y70-3	E642A/1A	YES	1
	DAP	APDAP08A	D3602	FUSE PANEL D3602	200	A2Y200-3	E7	100	A2Y100-3	E642A/1A	YES	6
A	DAP	APDAP22A	C57622	SFRCS NON-ESS SV	200	A2Y200-3	E7	20	A2Y20-1	E642A/1B, DCN 25	YES	6
	DBN	BCDBN19A	C4606	CRD PRIMARY TRIP BKR B	200	A2Y200-3	E7	30	A2Y30-1	E642A/4A	YES	6
	DBN	BCDBN20A	XBD	BUS TIE XFMR BD	200	A2Y200-3	E7	20	A2Y20-1	E642A/4A	YES	6
	DBN	BCDBN21A	C2702	MISC WASTE EVAPORATOR PNL	200	A2Y200-3	E7	30	A2Y30-1	E642A/4B	YES	6
	DBN	BCDBN23A	BDF5	LTG DIST CENTER F5 BKR	200	A2Y200-3	E7	30	A2Y30-1	E642A/4B	YES	6
	DBN	BCDBN25A	C3626	DG 1-2 OIL PMP CTRL BOX	200	A2Y200-3	E7	30	A2Y30-1	E642A/4B	YES	6
	DBN	BPDBN01A	C5750B	ALT GEN XFMR CABINET	200	A2Y200-3	E7	70	A2Y70-3(A)	E642A/4A	YES	6
	DBN	BPDBN02A	HB01	13.8KV SWGR A DC CTRL	200	A2Y200-3	E7	70	A2Y70-3(A)	E642A/4A	YES	6
	DBN	BPDBN02B	HB14	13.8KV SWGR A DC CTRL	200	A2Y200-3	E7	NA	NONE	E642A/4A	YES	6
	DBN	BPDBN04A	F2	480VAC USS DC CTRL	200	A2Y200-3	E7	100	A2Y100-3(A	E642A/4A	YES	6
	DBN	BPDBN05A	F3	480VAC USS DC CTRL	200	A2Y200-3	E7	100	A2Y100-3(A	E642A/4A	YES	6
A	DBN	BPDBN07A	D2	BREAKER CONT POWER	200	A2Y200-3	E7	70	A2Y70-3	E642A/4A	YES	1
A	DBN	BPDBN11A	F7	BRKR CONT POWER (MDFP)	200	A2Y200-3	E7	60	A2Y60-1	E642A/4A	YES	1
A	DBN	BPDBN24A	RC4804	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/4B	YES	5
	DBP	BCDBP09A	C6720	AVV POSITION INDICATION	200	A2Y200-3	E7	10	A2Y10-1	E642A/2A	YES	6
	DBP	BCDBP17A	C4301	GEN VOLT REG CABINET	200	A2Y200-3	E7	35	A2Y35-1	E642A/2A	YES	6
	DBP	BCDBP18A	JT5302	GEN FIELD BRKR JT5302	200	A2Y200-3	E7	35	A2Y35-1	E642A/2A	YES	6
	DBP	BCDBP19A	C3303	GEN COOL SYS CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2A	YES	6
	DBP	BCDBP20A	C3611	RELAY CABINET C3611	200	A2Y200-3	E7	30	A2Y30-1	E642A/2A	YES	6
	DBP	BCDBP20B	C3618	RELAY CABINET C3618	200	A2Y200-3	E7	NA	NONE	E642A/2A	YES	6
	DBP	BCDBP21A	RC4602	RCS PRZR HEATERS CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	6
	DBP	BCDBP22A	C5105	COMB BUT VLV STN CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B, E200B	YES	6
	DBP	BCDBP23A	C5757B	EHC SYSTEM CABINET	200	A2Y200-3	E7	20	A2Y20-1	E642A/2B	YES	6
	DBP	BCDBP24A	C1708	PROCESS SAMPLE PANEL	200	A2Y200-3	E7	10	A2Y10-1	E642A/2B, E200B(J)	YES	6
	DBP	BCDBP25A	JT5302	DGT-1 OIL PMP CTRL BOX	200	A2Y200-3	E7	20	A2Y20-1	E642A/2B	YES	6

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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	DBP	BCDBP26A	HB01	13.8KV BKR HB01 CTRL	200	A2Y200-3	E7	5	A2Y5-1	E642A/2B, E200B(J)	YES	6
	DBP	BCDBP26B	HB03	13.8KV BKR HB03 CTRL	200	A2Y200-3	E7	NA	NONE	E642A/2B, E200B(J)	YES	6
	DBP	BCDBP27A	X02	START-UP XFMR 02	200	A2Y200-3	E7	20	A2Y20-1	E642A/2B	YES	6
	DBP	BCDBP28A	X1	MAIN XFMR 1	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	6
	DBP	BCDBP29A	RC3718	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	6
	DBP	BCDBP29B	RC2826	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP30A	RC3716	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	5
	DBP	BCDBP30B	RC1761	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	5
	DBP	BCDBP31A	RC4410	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	6
	DBP	BCDBP31B	RC3004	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP31C	RC3002	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP32A	C3316	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	20	A2Y20-1	E642A/2B	YES	6
	DBP	BCDBP32B	C3315	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP32C	C3313	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP32D	J13635	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP32E	C5404	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP32H	C5405	FIRE PROTECTION EQUIP	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP33A	RC4401	RELAY CABINET	200	A2Y200-3	E7	30	A2Y30-1	E642A/2B	YES	6
	DBP	BCDBP33B	RC2304	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP33C	RC3006	RELAY CABINET	200	A2Y200-3	E7	NA	NONE	E642A/2B	YES	6
	DBP	BCDBP34A	C5760C	ELEC METER & XDUCER CAB	200	A2Y200-3	E7	20	A2Y20-1	E642A/2B	YES	6
	DBP	BPDBP01A	C5750B	GEN-XFMR RELAY BOARD	200	A2Y200-3	E7	70	A2Y70-3(A)	E642A/1B	YES	6
	DBP	BPDBP02A	HB01	13.8KV SWGR BUS B DC CTRL	200	A2Y200-3	E7	70	A2Y70-3(A)	E642A/1B	YES	6
	DBP	BPDBP02B	HB14	13.8KV SWGR BUS B DC CTRL	200	A2Y200-3	E7	NA	NONE	E642A/1B	YES	6
	DBP	BPDBP04A	F2	480VAC F2 DC CTRL(ALT)	200	A2Y200-3	E7	100	A2Y100-3(A	E642A/1B	YES	6
	DBP	BPDBP05A	F3	480VAC USS F3 DC CTRL	200	A2Y200-3	E7	100	A2Y100-3	E642A/1B	YES	6
	DBP	BPDBP07A	D2	BREAKER CONT POWER ALT	200	A2Y200-3	E7	70	A2Y70-3	E642A/1B	YES	1
	DBP	BPDBP08A	D3603	FUSE PANEL D3603	200	A2Y200-3	E7	100	A2Y100-3(A	E642A/1B	YES	6
A	DBP	BPDBP11A	F7	480V UNIT SUB BUS F7(ALT)	200	A2Y200-3	E7	60	A2Y60-1	E642A/1B	YES	5
	DBP	BPDBP16A	C57922	SFRCS NON ESS SV	200	A2Y200-3	E7	20	A2Y20-1(A)	E642A/1B, DCN 26	YES	6
	DC MCC 1	1PD101A	D1P	125V DC DIST PANEL	1600	A2Y1600-4	E6/3	400	A2Y400-4(A	E6/3	YES	1
	DC MCC 1	1PD106A	P197-2	HP1 PUMP 1 DC LO PUMP	1600	A2Y1600-4	E6/3	10	A2Y10-4	E6/3	YES	1
	DC MCC 1	1PD128A	D1PA	125V DC MCC	1600	A2Y1600-4	E6/3	200	A2Y200-4(A	E6/3	YES	1
	DC MCC 1	1PD132A	D1N	125V DC DIST PANEL	1600	A2Y1600-4	E6/3	400	A2Y400-4(A	E6/3	YES	1
	DC MCC 1	1PD145A	D1NA	125V DC MCC	1600	A2Y1600-4	E6/3	200	A2Y200-4(A	E6/3	YES	1
	DC MCC 1	APD111A	D37E1	EMER LTG XFR SW 1	500	A2Y500-4	E6/3	80	A2Y80-3(A)	E6/3	YES	6
	DC MCC 1	APD112A	D57E1	EMER LTG XFR SW 3	500	A2Y500-4	E6/3	80	A2Y80-3(A)	E6/3	YES	6
	DC MCC 1	APD113A	MP0724	RCP BACKUP OIL LIFT PMP	500	A2Y500-4	E6/3	60	A2Y60-1	E6/3	YES	6
	DC MCC 1	APD114A	MP0721	RCP BACKUP OIL LIFT PMP	500	A2Y500-4	E6/3	60	A2Y60-1	E6/3	YES	6
	DC MCC 1	APD115A	MP0281	MFPT 1 EMERG BRG OIL PMP	500	A2Y500-4	E6/3	50	A2Y50-1	E6/3	YES	6
A	DC MCC 1	APD116A	YVA	125V DC INVERTER	500	A2Y500-4(A	E6/3	300	A2Y300-4(A	E6/3	YES	1
A	DC MCC 1	APD117A	P-371C	MUP1 AUX LUBE OIL PUMP	500	A2Y500-4	E6/3	10	A2Y10-1	E6/3	YES	1
	DC MCC 1	APD118A	MP0210	TG EMER BRG OIL PUMP	500	A2Y500-4	E6/3	225	A2Y225-1(A	E6/3	YES	6
A	DC MCC 2	2PD202A	D2P	125V DC DIST PANEL	1600	A2Y1600-4	E6/4	400	A2Y400-4(A	E6/4	YES	1
	DC MCC 2	2PD233A	D2N	125V DC DIST PANEL	1600	A2Y1600-4	E6/4	400	A2Y400-4(A	E6/4	YES	1
	DC MCC 2	BPD206A	P198-2	HP1 PMP 2 DC LUBE OIL PMP	1600	A2Y1600-4	E6/4	10	A6Y10-1	E6/4	YES	1

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DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	DC MCC 2	EPD211A	D41E1	EMER LTG XFR SW 2	500	A2Y500-4	E6/4	80	A2Y80-3(A)	E6/4	YES	6
	DC MCC 2	BPD212A	D49E1	EMER LTG XFR SW 4	500	A2Y500-4	E6/4	80	A2Y80-3(A)	E6/4	YES	6
	DC MCC 2	BPD213A	MP0723	RCP BACKUP OIL LIFT PMP	500	A2Y500-4	E6/4	60	A2Y60-1	E6/4	YES	6
	DC MCC 2	BPD214A	MP0722	RCP BACKUP OIL LIFT PMP	500	A2Y500-4	E6/4	60	A2Y60-1	E6/4	YES	6
	DC MCC 2	BPD215A	MP0282	MFPT 2 EMERG BRG OIL PMP	500	A2Y500-4	E6/4	50	A2Y50-1	E6/4	YES	6
A	DC MCC 2	BPD216A	YVB	125V DC INVERTER	500	A2Y500-4	E6/4	300	A2Y300-4(A	E6/4	YES	1
A	DC MCC 2	BPD217A	P-372C	MUP2 AUX LUBE OIL PUMP	500	A2Y500-4	E6/4	10	A2Y10-1	E6/4	YES	1
	DC MCC 2	BPD218A	MP0230	T-G H2 EMERG SEAL OIL PMP	500	A2Y500-4	E6/4	60	A2Y60-1	E6/4	YES	6
A	E1	1PBE105A	E15	480VAC MCC	2080	AK-50S	E4/1	480	AK-25/SST	E4/1	YES	1
	E1	1PBE106A	E12A	480VAC MCC	2080	AK-50S	E4/1	600	AK-25/SST	E4/1	YES	1
	E1	1PBE107A	E11A	480VAC MCC	2080	AK-50S	E4/1	600	AK-25/SST	E4/1	YES	1
	E1	1PBE110A	E14	480VAC MCC	2080	AK-50S	E4/1	480	AK-25/SST	E4/1	YES	1
	E1	1PBE111A	P56-1	CS PUMP 1	2080	AK-50S	E4/1	600	AK-25/SST	E4/1	YES	1
	E1	1PBE118A	E16A	480VAC MCC	2080	AK-50S	E4/1	600	AK-25/SST	E4/1	YES	1
	E1	APBE113A	F13	480V AC MCC	2080	AK-50S	E4/1	600	AK-25/SST	E4/1	YES	6
	E11A	1PBE1101A	E11C	AUTO BKR REMOVED	600	AK-25/SST	E4/1	N/A	NONE	E6/1	YES	1,8
	E11A	1PBE1102A	MC0621	H2 DILUTION SYS BLOWER 1	600	AK-25/SST	E4/1	70	HFB 3070	E6/1	YES	6
A	E11A	1PBE1103A	HP02C	HPI 1 DISCH ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11A	1PBE1104A	MV5439	ECCS RM 105 HVAC ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E11A	1PBE1105A	HP02D	HPI 1 DISCH ISO VLV	480	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
A	E11A	1PBE1106A	DH01B	LPI LINE 1 VLV	600	AK-25/SST	E4/1	70	HFB 3070	E6/1	YES	1
	E11A	1PBE1107A	MV5440	ECCS RM 105 HVAC ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E11A	1PBE1112A	DH09B	CTMT SUMP ISO VLV B	600	AK-25/SST	E4/1	N/A	NONE	DEPOWERED	N/A	5
	E11A	1PBE1113A	MV5090	CTMT H2 DLTN LINE 1 VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	1PBE1115A	MP891A	ECCS SUMP PUMP 1A	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
	E11A	1PBE1116A	MP891B	ECCS SUMP PUMP 1B	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
	E11A	1PBE1117A	MP893A	ECCS SUMP PUMP 3A	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
	E11A	1PBE1118A	MP893B	ECCS SUMP PUMP 3B	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
A	E11A	1PBE1120A	E11B	480VAC MCC	600	AK-25/SST	E4/1	225	HKA 225	E6/1	YES	1
A	E11A	1PBE1121A	DH2733	DH PUMP 1 BWST SUCT VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11A	1PBE1123A	MV2001	CTMT ISO VALVE PENET 72A	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	1PBE1124A	MV2003	CTMT ISO VALVE PENET 74A	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	1PBE1129A	MVRC1B	PRZR SPRAY LINE ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E11A	1PBE1132A	E11D	AUTO BKR REMOVED	600	AK-25/SST	E4/1	N/A	NONE	E6/1	YES	1,8
	E11A	1PBE1135A	MV5422	ECCS RM 105 CLR 4 OUT VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	1PBE1136A	MV5421	ECCS RM 105 CLR 5 OUT VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E11A	1PBE1157A	DH07B	BWST ISO VLV B	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11A	1PBE1170A	MV5038	CTMT H2 DILUT OUT ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	APBE1109A	MVMU40	DEMIN WTR STOP VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11A	APBE1125A	MVMU12A	MU FILTER 1 IN VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11B	1PBE1108A	MV2012A	CTMT NORM SUMP ISO VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	6,21
	E11B	1PBE1155A	DH2735	PRZR SPRAY LINE ISO VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1158A	MV1567A	CC IN ISO VLV 1 TO CRD	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	6,21
	E11B	1PBE1162A	CFD1B	CORE FLOOD TK 1 ISO VLV	225	HKA 225	E6/1	40	HFB 3040	E6/1, DCN 57	NO	1,21
A	E11B	1PBE1163A	MVCF02B	CF TANK 1 SAMPLE VALVE	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	6,21
	E11B	1PBE1165A	MVCF05B	CF TANK 1 VENT VALVE	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	6,21

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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORD-INATED	NOTES
A	E11B	1PBE1171A	MU02A	LETDOWN CLR OUT VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1172A	MU02B	LETDOWN CLR IN VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1173A	CC1407A	CC OUT ISO VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1174A	MU59A	RCP 2-1 SEAL RET LINE VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1175A	MU59B	RCP 2-2 SEAL RET LINE VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1176A	CC1411A	CC IN ISO VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1177A	MU59C	RCP 1-1 SEAL RET LINE VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1178A	MU59D	RCP 1-2 SEAL RET LINE VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	1,21
	E11B	1PBE1180B	XYE2A	INCOMING XFER YE2	225	HKA 225	E6/1	50	HFB 3050	E6/1	NO	1,21
	E11B	1PBE1181A	MV0240A	RC PRZR SMPL VLV 1	225	HKA 225	E6/1	15	HFB 3015	E6/1	NO	6,21
A	E11B	1PBE1183A	DH12	DH NORM SUCT LINE VLV	225	HKA 225	E6/1	40	HFB 3040	E6/1	NO	1,21
	E11B	APBE1169A	MCC561	CTMT RECIRCULATIN FAN 1	225	HKA 225	E6/1	*50	HFB 3150	E6/1	NO	6,21
	E11C	1PBE1137A	MV5070	CTMT VACM RELIEF VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
	E11C	1PBE1138A	MV5071	CTMT VACM RELIEF VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
	E11C	1PBE1139A	MV5072	CTMT VACM RELIEF VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
	E11C	1PBE1140A	MV5073	CTMT VACM RELIEF VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
	E11C	1PBE1141A	MV5074	CTMT VACM RELIEF VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
A	E11C	1PBE1142A	SW1366	CAC 1 IN ISO VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	1
	E11C	1PBE1144A	MV5261A	CTRM EMER VENT FN IN VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	6
A	E11C	1PBE1150A	E11E	480V AC MCC FEEDER	600	AK-25/SST	E6/1	70	HFB 3070	E6/1	YES	1
	E11C	1PBE1154A	C75-1	CCW PMP RM VENT FAN 1	600	AK-25/SST	E6/1	30	HFB 3030	E6/1	YES	1
	E11C	1PBE1156A	CS1530	CTMT SPRAY ISO VLV	600	AK-25/SST	E6/1	15	HFB 3015	E6/1	YES	1
	E11C	1PBE1159A	MV0612	MN FW 1 ISO VLV	600	AK-25/SST	E6/1	100	HFB 3100	E6/1	YES	6
	E11C	APBE1167A	BSWX79D3	CTMT LIGHTING DISC SWITCH	600	AK-25/SST	E6/1	150	HFB 3150	E6/1	YES	6
	E11C	APBE1168A	X39D1	CONTAINMENT LIGHTING XFMR	600	AK-25/SST	E6/1	70	HFB 3070	E6/1	YES	6
	E11C	APBE1179A	MP0411	FRE WTR XFER PUMP 1	600	AK-25/SST	E6/1	150	HFB 3150	E6/1	YES	6
	E11C	APBE1186A	NC3801	H2 RECOMBINATION STARTER	600	AK-25/SST	E6/1	100	HFB 3100	E6/1, E200	YES	6
	E11C	APBE1186B	NC3802	H2 RECOMBINATION STATION	600	AK-25/SST	E6/1	N/A	NONE	E6/1, E200	YES	6
	E11C	APBE1186C	C3830	CONT PANEL C3830	600	AK-25/SST	E6/1	N/A	NONE	E6/1, E200	YES	6
A	E11D	1PBE1126A	DH1517	DH NORM SUCT LINE 1 VLV	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	1
A	E11D	1PBE1127D	MU6405	RC MU PUMP SUCT VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11D	1PBE1133A	MV5067	CTMT H2 PURGE FN 1 IN VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E11D	1PBE1147F	DH6409	MUP DISCH X-CONN VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11D	1PBE1161A	CC2645	CC RETURN HDR 1 VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11D	1PBE1190A	DBC1PN	125VDC BATTERY CHARGER	600	AK-25/SST	E4/1	225	HKA 225	E6/1	YES	1
	E11D	1PBE1194E	MU6421	MU CTMT ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11D	1PBE1195A	MV0831	DHR CLR 1 OUT XOVER	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11D	1PBE1197A	MRES327	CTRM VENT SYS VACM PMP 1	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11D	1PBE1199A	MV1328	CC CRD BOOST PMP SUCT VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E11D	APBE1185A	MP0381	BA PUMP 1	600	AK-25/SST	E4/1	20	HFB 3020	E6/1	YES	6
	E11D	APBE1188A	WE1711	BA ADD TANK 1 HEATER 1	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
	E11D	APBE1189A	WE1712	BA ADD TANK 1 HEATER 2	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
A	E11D	APBE1191A	P-371B	MUP 1 MAIN LO PUMP	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
A	E11D	APBE1192A	P-371D	MUP 1 AUX GEAR LO PUMP	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E11E	1PBE1145A	MV0645B	CTMT ISO VLV PENT 73	70	HFB 3070	E6/1	15	HFB 3015	E6/1	NO	6,21
A	E11E	1PBE1146A	AF3B49	AFWP 1 DISCH TO SG2	70	HFB 3070	E6/1	15	HFB 3015	E6/1	NO	1,21

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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	E11E	1PBE1148A	MV4906	CTRM STANDBY COND 1 DMPR	70	HFB 3070	E6/1	15	HFB 3015	E6/1	NO	6,21
A	E11E	1PBE1160A	AF608	AFW TO SG1 ISO VLV	70	HFB 3070	E6/1	15	HFB 3015	E6/1	NO	1,21
A	E11E	1PBE1187A	DH64	LPI/HPI CROSS-TIE VLV	70	HFB 3070	E6/1	15	HFB 3015	E6/1	NO	1,21
	E12A	1PBE1201A	MS0611	CTRM STANDBY COND 1 FAN	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
A	E12A	1PBE1202A	E12C	480VAC MCC	600	AK-25/SST	E4/1	225	HKA 225	E6/1	YES	1
	E12A	1PBE1207A	E12D	480VAC MCC	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1208E	HV5597	BATT RM 429B ATM DMPR	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1209A	C21-1	CTRM EVS FAN 1	600	AK-25/SST	E4/1	20	HFB 3020	E6/1	YES	1
	E12A	1PBE1213A	WMB1	Power Circuit(WMB1)	250	LA 250	E6/1 (BE1223)	70	HFB 3070	E6/1	YES	5
	E12A	1PBE1214A	WMB2	Power Circuit(WMB2)	250	LA 250	E6/1 (BE1223)	70	HFB 3070	E6/1	YES	5
	E12A	1PBE1215A	WMB3	Power Circuit(WMB3)	250	LA 250	E6/1 (BE1223)	70	HFB 3070	E6/1	YES	5
A	E12A	1PBE1216A	S33-1	CTRM EMERG A/C UNIT 1	600	AK-25/SST	E4/1	40	HFB 3040	E6/1	YES	1
	E12A	1PBE1217A	C71-1	LV SWGR RM VENT FAN 1	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1218A	SW1382	AFP 1 SUCT VLV FROM SW	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1219A	MC0301	EMER VENT FAN 1	600	AK-25/SST	E4/1	70	FHB 3070	E6/1	YES	6
	E12A	1PBE1220A	YRF1	480VAC/125VDC RECTIFIER	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6,26
A	E12A	1PBE1221A	YRF3	480VAC/125VDC RECTIFIER	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6,26
	E12A	1PBE1222A	C73-1	AFP RM VENT FAN 1	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	1
	E12A	1PBE1223A	WMB1,2,3	Power Circuit (WMB1,2,3)	600	AK-25/SST	E4/1	250	LA 250	E6/1, CASCADED	YES	5,25
	E12A	1PBE1224A	E12B	AUTO BKR REMOVED	600	AK-25/SST	E4/1	N/A	NONE	E6/1	YES	1,8
	E12A	1PBE1226A	CC5095	CC HDR 1 IN ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
A	E12A	1PBE1227A	CC5097	CC HDR 1 RETURN ISO VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1232A	SW2927	CTRM EVS COND UNIT IN VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1233A	DBC1P	125VDC BATTERY CHARGER	600	AK-25/SST	E4/1	225	HKA 225	E6/1	YES	1
	E12A	1PBE1234A	E12E	480VAC MCC	600	AK-25/SST	E4/1	150	HFB 3150	E6/1	YES	1
	E12A	1PBE1235A	DBC1N	125VDC BATTERY CHARGER	600	AK-25/SST	E4/1	225	HKA 225	E6/1	YES	1
	E12A	1PBE1237A	MC5017	EMER VENT DISCH FAN DMPR	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12A	1PBE1238A	MC5056	CROSS-TIE DUCT WORK DMPR	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12A	1PBE1239A	MC5024	FUEL HAND AREA BYPASS VLV	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E12A	1PBE1240A	HV5305A	LV SWGR RM 429 DAMPER	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12A	1PBE1241A	HV5305B	LV SWGR RM 429 DAMPER	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12B	1PBE1255A	C25-1	EDG RM 1 VENT FAN 1	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	1
	E12B	1PBE1256A	C25-2	EDG RM 1 VENT FAN 2	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	1
	E12B	1PBE1258A	E3621	EMER DG 1 IMMERSION HTR	600	AK-25/SST	E4/1	30	HFB 3030	E6/1	YES	6
	E12B	1PBE1259A	YE1	FDR TO 120V AC MCC	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12B	1PBE1261A	MP1471	EMER DG 1 SOAK PUMP	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E12B	1PBE1271A	MS106A	AFPT 1 MS IN X-CONN	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12B	1PBE1273A	E12F	480VAC MCC	600	AK-25/SST	E4/1	100	HFB 3100	E6/1	YES	1
	E12B	1PBE1285A	C07B-1	BATT RM VENT FAN 1	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	1
	E12B	APBE1257A	MP0081	DO XFER PUMP 1	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12B	APBE1267A	MP1591	FUEL OIL BOOSTER PUMP 1	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12B	APBE1268A	MP175A	DO STRG TK AREA SUMP PMP	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12B	APBE1269A	WE1091	DO PMP HSE ELEC UNIT HTR	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12B	APBE1270A	X3021	LTG XFMR DO PMP HOUSE	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
	E12B	APBE1289A	MP1473	EDG 1 AC LUBE OIL PUMP	600	AK-25/SST	E4/1	15	HFB 3015	E6/1	YES	6
A	E12C	1PBE1205A	C99-2	SW PMP RM EXH FAN 2	225	HKA 225	E6/1	30	HFB 3030	E6/1,E6/5	NO	1,21

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DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	E12C	1PBE1210A	E12D	480VAC MCC	225	HKA 225	E6/1	150	HFB 3150	E6/1,E6/5	NO	1,21
A	E12C	1PBE1212A	C99-1	SW PMP RM EXH FAN 1	225	HKA 225	E6/1	30	HFB 3030	E6/1,E6/5	NO	1,21
	E12C	1PBE1274A	MF0151	SW PUMP STRNR 1	225	HKA 225	E6/1	15	HFB 3015	E6/1,E6/5	NO	6,21
A	E12C	1PBE1275A	MV1379	SW PUMP STRNR DRAIN VALVE	225	HKA 225	E6/1	15	HFB 3015	E6/1,E6/5	NO	6,21
A	E12C	1PBE1277A	SW1399	SW ISO VALVE TO CLNG WTR	225	HKA 225	E6/1	15	HFB 3015	E6/1,E6/5	NO	1,21
	E12C	1PBE1280A	EF12C	480VAC MCC	225	HKA 225	E6/1	90	HFB 3090	E6/1,E6/5	NO	6,21
A	E12C	1PBE1281A	SW2929	SW TO INT STRU VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1,E6/5	NO	1,21
A	E12C	1PBE1282A	SW2931	SW TO CLG TOWER MU VLV	225	HKA 225	E6/1	15	HFB 3015	E6/1,E6/5	NO	1,21
	E12D	APBE1203A	MC0100	TRAVELING SCREEN AREA VNT	150	HFB 3150	E6/5	30	HFB 3030	E6/5	NO	1,21
	E12D	APBE1204A	MF15401	BACKUP SW PUMP STRAINER	150	HFB 3150	E6/5	15	HFB 3015	E6/5	NO	6,21
A	E12D	APBE1206A	MV4690	SW BACKUP PMP DRN VALVE	150	HFB 3150	E6/5	15	HFB 3015	E6/5	NO	6,21
	E12E	1PBE1245A	MU6419	MU DISCH VLV	150	HFB 3150	E6/1	15	HFB 3015	E6/1	NO	1,21
	E12E	1PBE1286A	HP32	HPI PMP1 RECIRC VLV	150	HFB 3150	E6/1	15	HFB 3015	E6/1	NO	1,21
	E12E	1PBE1292A	C31-4	ECCS RM 105 CLR FAN 4	150	HFB 3150	E6/1	30	HFB 3030	E6/1	NO	6,21
	E12E	1PBE1293A	C31-5	ECCS RM 105 CLR FAN 5	150	HFB 3150	E6/1	30	HFB 3030	E6/1	NO	6,21
	E12E	1PBE1294H	MS611	MV0611 PWR CKT	150	HFB 3150	E6/1	15	HFB 3015	E6/1	NO	6,21
	E12E	1PBE1296A	P197-1	HPI PMP1 AC LO PMP	150	HFB 3150	E6/1	15	HFB 3015	E6/1	NO	1,21
	E12F	1PBE1298A	P195-1	EDG FUEL OIL TRANSFER PUM	100	HFB 3100	E6/1	15	HFB 3015	E6/1	NO	1,21
	E12F	APBE1299A	MC0111	EMER DG AIR COMPSR 1	100	HFB 3100	E6/1	30	HFB 3030	E6/1	NO	6,21
A	E14	1PBE1401A	C1-1	CAC FAN 1 LRGST LOAD USED	480	AK-25/SST	E4/1	25	HFB 3025	E6/1	YES	1
	E15	1PBE105A	C1-3	CACS FAN 3 LRGST LOAD	480	AK-25/SST	E4/1	N/A	NONE	E6/1	YES	1
	E16A	1PBE1609A	E16B	INCMG CIRC BKR E16B	600	AK-25/SST	E4/1	250	LB 250	E6/5	YES	1
	E16A	1PBE1611A	RE4598AA	STA VENT EFF HI RAD MON	600	AK-25/SST	E4/1	15	HFB 3015	E6/5	YES	6
	E16A	1PBE1612A	RE4598AB	STA VENT EFF HI RAD MON	600	AK-25/SST	E4/1	15	HFB 3015	E6/5	YES	6
A	E16A	1PBE1616A	XY1	FEEDER CVTXY1 (86-0272)	600	AK-25/SST	E4/1	40	HFB 3040	E6/5, DCN 80	YES	1
	E16A	1PBE1617A	XY3	FEEDER CVTXY3	600	AK-25/SST	E4/1	40	HFB 3040	E6/5, DCN 82	YES	1
	E16A	APBE1615A	BSW220X	E883/2 SECURITY	600	AK-25/SST	E4/1	100	HFB 3100	E6/5	YES	1
	E16B	1PBE1602A	RC11	PORV BLOCK VLV	250	LB 250	E6/5	15	HFB 3015	E6/5	NO	1,21
	E16B	1PBE1613A	RE4597AA	CTMT POST ACC HI RAD MON	250	LB 250	E6/5	15	HFB 3015	E6/5	NO	6,21
	E16B	1PBE1614A	RE4597AB	CTMT POST ACC HI RAD MON	250	LB 250	E6/5	15	HFB 3015	E6/5	NO	6,21
A	EDG-1	1PAC101A	C1	4.16KV AC SWGR	N/A	NONE	E3	1200	50 DHP	E3	YES	1,20
A	EDG-2	2PAD101A	B1	4.16KV AC SWGR	N/A	NONE	E3	1200	50 DHP	E3	YES	1,20
	EF12C	3PBEF124A	MF0153	SW PMP STRNR 3	90	HFB 3090	E6/1	15	HFB 3015	E6/1	NO	6,21
A	EF12C	3PBEF125A	SW1381	SW PMP STRNR 3 DRN VLV	90	HFB 3090	E6/1	15	HFB 3015	E6/1	NO	6,21
	EF12C	CPBEF123A	MP0060	JOCKEY FIRE PUMP	90	HFB 3090	E6/1	20	HFB 3020	E6/1	NO	6,21
A	F1	2PBF105A	F15	480VAC MCC	2080	AK-50S	E4/2	480	AK-25/SST	E4/2	YES	1
	F1	2PBF110A	F14	480VAC MCC	2080	AK-50S	E4/2	480	AK-25/SST	E4/2	YES	1
	F1	2PBF111A	P56-2	CS PUMP 2	2080	AK-50S	E4/2	600	AK-25/SST	E4/2	YES	1
	F1	2PBF114A	F12A	480VAC MCC	2080	AK-50S	E4/2	600	AK-25/SST	E4/2	YES	1
	F1	2PBF115A	F11A	480VAC MCC	2080	AK-50S	E4/2	600	AK-25/SST	E4/2	YES	1
	F1	2PBF118A	F16A	480VAC MCC	2080	AK-50S	E4/2	600	AK-25/SST	E4/2	YES	1
	F1	BPBF113A	F13	480V AC MCC	2080	AK-50S	E4/2	600	AK-25/SST	E4/2	YES	6
A	F11A	2PBF1101B	XYF2A	TDR TO 240V AC MCC	600	AK-25/SST	E4/2	50	HFB 3050	E6/2	YES	1
	F11A	2PBF1102A	MRE532B	CTRM VENT SYS VACM PMP 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1103A	MV4907	CTRM STANDBY COND UNIT	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11A	2PBF1106A	EC5096	EC HDR 2 IN ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1

SYMBOLS: ACC - ACCEPTABLE (A) - ASSUMED TYPE

A = Added to FAOR
Blank = Same as CAR Rev. 5
C = Correction

DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	F11A	2PBF1108E	MU6422	MU CTMT ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11A	2PBF1109A	MC0622	H2 DILUTION SYS BLWR 2	600	AK-25/SST	E4/2	70	HFB 3070	E6/2	YES	6
A	F11A	2PBF1110A	MV5065	CTMT H2 PURGE LINE 2 VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1111A	MS603	SG 2 DRAIN LINE ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
↓	F11A	2PBF1112A	C75-2	CCW PMP RM VENT FAN 2	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	1
	F11A	2PBF1118A	AF599	AFW TO SG2 ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11A	2PBF1119A	CC5098	CC HDR 2 RETURN ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11A	2PBF1120A	CF01A	CF TK2 ISO VALVE	600	AK-25/SST	E4/2	40	HFB 3040	E6/2	YES	1
	F11A	2PBF1121A	MVCF02A	CF TANK 2 SAMPLE VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11A	2PBF1123A	MVCF05A	CF TANK 2 VENT VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1124A	MS107	AFPT 2 MS IN ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F11A	2PBF1125A	MV2736	PRZR SPRAY LINE ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11A	2PBF1126A	RC239A	PZR VAPOR SPACE SMPL LINE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11A	2PBF1127A	RC239B	PZR LIQUID SAMPLE VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F11A	2PBF1128A	MV0240B	RC PRZR SAMPLE VLV 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
↓	F11A	2PBF1130A	DH11	DH NORM SUCT LINE VLV	600	AK-25/SST	E4/2	40	HFB 3040	E6/2	YES	1
	F11A	2PBF1131A	S33-2	CTRM EMERG A/C UNIT 2	600	AK-25/SST	E4/2	40	HFB 3040	E6/2	YES	1
	F11A	2PBF1132A	SW2928	CTRM EVS COND UNIT IN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F11A	2PBF1133A	MV1338	CC CRD BOOST PMP SUCT VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1137A	F11B	FEEDER TO MCC F11B	600	AK-25/SST	E4/2	225	HKA 225	E6/2	YES	1
A	F11A	2PBF1140A	MV2000	CTMT ISO VALVE PENET 71A	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1143A	F11C	AUTO BKR REMOVED	600	AK-25/SST	E4/2	N/A	NONE	E6/2	YES	1,8
A	F11A	2PBF1144A	MV2002	CTMT ISO VALVE PENET 73A	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11A	2PBF1146A	F11D	FEEDER TO MCC F11D	600	AK-25/SST	E4/2	225	HKA 225	E6/2	YES	1
	F11A	2PBF1149A	C21-2	CTRM EVS FAN 2	600	AK-25/SST	E4/2	20	HFB 3020	E6/2	YES	1
	F11A	2PBF1180A	MV5075	CTMT VACUUM RELIEF VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1181A	MV5076	CTMT VACUUM RELIEF VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1182A	MV5077	CTMT VACUUM RELIEF VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1183A	MV5078	CTMT VACUUM RELIEF VALVE	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F11A	2PBF1184A	MV5079	CONTROL VACUUM RELIEF VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11A	2PBF1189A	F11E	FEEDER TO MCC F11E	600	AK-25/SST	E4/2	150	HFB 3150	E6/2	YES	1
	F11A	BPBF1113A	MC0562	CTMT RECIRC FAN 2	600	AK-25/SST	E4/2	150	HFB 3150	E6/2	YES	6
	F11A	BPBF1114A	X49D1	CTMT LTG XFMR	600	AK-25/SST	E4/2	70	HFB 3070	E6/2	YES	6
	F11A	BPBF1115A	BSWX79D1	CTMT LTG DISC SWCH	600	AK-25/SST	E4/2	150	LA 150	E6/2	YES	6
	F11A	BPBF1116A	X57D1	CTRM & AUX BLDG LTG XFMR	600	AK-25/SST	E4/2	50	HFB 3050	E6/2	YES	6
A	F11B	2CBF1188H	MS107A	SG 1 TO AFPT 2	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11B	2PBF1138A	MV2012B	CTMT NORM SUMP ISO VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
A	F11B	2PBF1147A	CS1531	CS PUMP OUT VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
↓	F11B	2PBF1148A	DH07A	BWST OUT VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11B	2PBF1158A	CC1407B	CC OUT ISO VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11B	2PBF1159A	CC1411B	CC IN ISO VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11B	2PBF1160A	MV0624B	CTMT ISO VALVE PENET 72	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11B	2PBF1176A	MV1567B	CC IN ISO VALVE 2 TO CRD	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11B	2PBF1186A	MV5262	CTRM EMER VNT FN 2 IN VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11B	BPBF1152A	MP0412	PRI WATER XFER PUMP 2	225	HKA 225	E6/2	150	HFB 3150	E6/2	NO	6,21
A	F11C	2CBF1141B	HP02B	HP INJECT VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1

SYMBOLS; ACC = ACCEPTABLE (A) = ASSUMED TYPE

A = Added to FADR

Blank = Same as CAR Rev. 5

C = Correction

DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	F11C	2PBF1129A	DH1518	DH NORM SUCTION VLV	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	1
	F11C	2PBF1134A	DH2734	DH BWST SUCTION VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11C	2PBF1136A	DH01A	LP INJECT VLV	600	AK-25/SST	E4/2	70	HFB 3070	E6/2	YES	1
	F11C	2PBF1139A	HP02A	HP INJECT VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11C	2PBF1142A	DH09A	CTMT EMER SUMP VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2, DCN 99	YES	5,11
	F11C	2PBF1151A	MV5037	CTMT H2 DILUT OUT ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F11C	2PBF1177A	SW1383	AFP 2 SUCTION VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11C	BPBF1167A	P-372B	MUP MN OIL PUMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11C	BPBF1168A	P-372D	MUP AUX LUBE OIL PUMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F11D	2PBF1117A	MV0601	MN FW 2 ISOLATION VALVE	225	HKA 225	E6/2	100	HFB 3100	E6/2	NO	6,21
A	F11D	2PBF1142A	DH09A	CTMT EMERG SUMP VLV	600	AK-25/SST	E4/2	N/A	DEPRD	E6/2, DCN 99	N/A	5,11
	F11D	2PBF1145A	WF60	H2 PURGE SYST FLT	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1153A	MPB92A	ECCS SUMP PUMP 2A	225	HKA 225	E6/2	30	HFB 3030	E6/2	NO	6,21
	F11D	2PBF1154A	MPB92B	ECCS SUMP PUMP 2B	225	HKA 225	E6/2	30	HFB 3030	E6/2	NO	6,21
A	F11D	2PBF1157A	C31-3	ECCS RM 113 CLR FAN 3	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
A	F11D	2PBF1161A	CC2649	CC RETURN HDR 2 VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11D	2PBF1163A	MV5423	ECCS RM 113 CLR 3 OUT VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1164A	MV5068	CTMT H2 PURGE FN 2 IN VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1165A	MV5424	ECCS RM 115 CLR 2 OUT VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1166A	MV5425	ECCS RM 115 CLR 1 OUT VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1178A	MV5441	ECCS RM 115 HVAC ISO VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1179A	MV5442	ECCS RM 115 HVAC ISO VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	2PBF1185A	MV0830	DHR CLR 2 OUT XOVER	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
A	F11D	2PBF1187A	DBC2PN	FDR TO BAT CHGR DBC2PN	225	HKA 225	E6/2	225	HKA 225	E6/2	NO	1,21
	F11D	BPBF1107A	MVMU12B	MU FLT 2 IN VLV	225	HKA 225	E6/2	15	HFB 3015	E6/2	NO	6,21
	F11D	BPBF1169A	MP0382	BA PUMP 2	225	HKA 225	E6/2	20	HFB 3020	E6/2	NO	6,21
	F11D	BPBF1171A	WE1721	BA ADD TANK 2 HEATER 1	225	HKA 225	E6/2	30	HFB 3030	E6/2	NO	6,21
	F11D	BPBF1172A	WE1722	BA ADD TANK 2 HEATER 2	225	HKA 225	E6/2	30	HFB 3030	E6/2	NO	6,21
A	F11E	2PBF1192A	C31-1	ECCS RM 115 CLR FAN 1	150	HFB 3150	E6/2	30	HFB 3030	E6/2	NO	6,21
	F11E	2PBF1193A	C31-2	ECCS RM 115 CLR FAN 2	150	HFB 3150	E6/2	30	HFB 3030	E6/2	NO	6,21
	F11E	2PBF1194A	HP31	HPI PMP 2 RECIRC VLV	150	HFB 3150	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11E	2PBF1195A	DH63	LPI/HPI CROSS-TIE VLV	150	HFB 3150	E6/2	15	HFB 3015	E6/2	NO	1,21
	F11E	BPBF1196A	F11F	480VAC MCC F11F	150	HFB 3150	E6/2	150	HFB 3150	E6/2	NO	6,21
	F11F	BPBF1197A	C1710	SAMPLE PMP SPEED CTRLR	150	HFB 3150	E6/2	15	HFB 3015	E5/2	NO	6,21
	F11F	BPBF1197B	MP216	SAMPLE PMP SPEED CTRLR	150	HFB 3150	E6/2	N/A	NONE	E5/2, E200B	NO	6,21
	F11F	BPBF1198A	C1709	DEMIN WTR PMP SPEED CTRLR	150	HFB 3150	E6/2	15	HFB 3015	E5/2	NO	6,21
	F11F	BPBF1198B	MP217	DEMIN WTR PMP SPEED CTRLR	150	HFB 3150	E6/2	N/A	NONE	E5/2, E200B	NO	6,21
	F12A	2PBF1201A	AF3871	AFWP 2 DISCH TO SG1	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1202A	F12C	AUTO BKR REMOVED	600	AK-25/SST	E1/2	N/A	NONE	E6/2	YES	1,8
	F12A	2PBF1203A	MC0302	EMER VENT FAN 2	600	AK-25/SST	E4/2	70	HFB 3070	E6/2	YES	6
	F12A	2PBF1204A	C133	LV SWGR RM VENT FAN 2	600	AK-25/SST	E4/2	40	HFB 3040	E6/2	YES	1
	F12A	2PBF1205A	C73-2	AFP RM VENT FAN 2	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	1
	F12A	2PBF1206A	F12B	AUTO BKR REMOVED	600	AK-25/SST	E1/2	N/A	NONE	E6/2	YES	1,8
	F12A	2PBF1208F	MU0640B	MU CROSS CONNECT ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1209A	DBC2P	BATTERY CHARGER DBC2P	600	AK-25/SST	E4/2	225	HKA 225	E6/2	YES	1
	F12A	2PBF1210A	HV5598	BATT RM 428A ATM DMPR	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1

SYMBOLS: ACC - ACCEPTABLE (A) - ASSUMED TYPE

A - Added to FAOR
Blank = Same as CAR Rev. 5
C = Correction

DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	F12A	2PBF1212A	DBC2N	BATTERY CHARGER DBC2N	600	AK-25/SST	E4/2	225	HKA 225	E6/2	YES	1
	F12A	2PBF1213A	WLB11	Power Circuit (WLB11)	250	LA 250	E6/2 (BF1217)	70	HFB 3070	E6/2	YES	5
	F12A	2PBF1214A	WLB12	Power Circuit (WLB12)	250	LA 250	E6/2 (BF1217)	70	HFB 3070	E6/2	YES	5
	F12A	2PBF1215A	WLB13	Power Circuit (WLB13)	250	LA 250	E6/2 (BF1217)	70	HFB 3070	E6/2	YES	5
A	F12A	2PBF1217A	WLB11,2,3	PWR CKT PZR HTR	600	AK-25/SST	E4/2	250	LA 250	E6/2, CASCADED	YES	5,25
	F12A	2PBF1218A	MC5018	EMER VNT FAN DISCH DMPR 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12A	2PBF1220A	YRF2	480VAC/125VDC RECTIFIER	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	6
	F12A	2PBF1221A	YRF4	480VAC/125VDC RECTIFIER	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	6
A	F12A	2PBF1223A	SW1367	CAC 2 IN ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F12A	2PBF1224A	SW1368	CAC 3 IN ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1225A	MC5057	CROSS TIE DUCT WORK DMPR	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12A	2PBF1226A	MV5025	FUEL HAND AREA BYPASS VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F12A	2PBF1227A	CC1409	LTDWN CLR 1 CC WTR IN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F12A	2PBF1228A	CC1410	LTDWN CLR 2 CC WTR IN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1229A	MS0612	CTRM STANDBY COND 2 FAN	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	6
A	F12A	2PBF1230A	P195-2	EDG FUEL OIL TRANSFER PUM	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1231A	P198-1	HPI PMP 2 AC LO PMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1237A	MU01A	LETDOWN CLR 1 IN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1238A	MU01B	LETDOWN CLR 2 IN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1239A	HV5314A	LV SWGR RM 42B DAMPER	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12A	2PBF1285J	RC200	PZR SMPL CTMT VNT HDR VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12B	2PBF1255A	C25-3	EDG RM 2 VENT FAN 3	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	1
	F12B	2PBF1256A	C25-4	EDG RM 2 VENT FAN 4	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	1
	F12B	2PBF1258A	C3622	EMER DG 2 IMMERSION HTR	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	6
A	F12B	2PBF1259A	C78-2	BATT RM VENT FAN 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12B	2PBF1260A	MVRC02	PRZR 1 SPRAY LINE VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12B	2PBF1261A	MP1472	EMER DG 2 SOAK PUMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F12B	2PBF1262A	AF3872	AFWP 2 DISCH TO SG2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
A	F12B	2PBF1270A	YF1	FEEDER TO 120V AC MCC	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12B	BPBF1257A	MP0082	DO XFER PUMP 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12B	BPBF1263A	MC0112	EMER DG AIR COMPSR 2	600	AK-25/SST	E4/2	30	HFB 3030	E6/2	YES	6
	F12B	BPBF1267A	MP1592	FUEL OIL BOOSTER PUMP 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12B	BPBF1268A	MP1738	DO STRG TK AREA SUMP PMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12B	BPBF1269A	WE1092	DO PMP HSE ELEC UNIT HTR	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12B	BPBF1289A	MP1474	EDG 2 AC LUBE OIL PUMP	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12C	2PBF1274A	MF0152	SW PUMP STRNR 2	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
A	F12C	2PBF1275A	SW1380	SWP 2 STRN DRN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	6
	F12C	2PBF1277A	SW1395	TPCW HX IN HEADER ISO VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12C	2PBF1278A	F12D	FDR BKR TO MCC F12D	600	AK-25/SST	E4/2	150	HFB 3150	E6/2	YES	1
	F12C	2PBF1280A	EF12C	480VAC MCC	600	AK-25/SST	E4/2	90	HFB 3090	E6/2	YES	6
A	F12C	2PBF1281A	SW2930	SW TO INT FOREBAY VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12C	2PBF1282A	SW2932	SW TO COLLECT BASIN VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/2	YES	1
	F12D	2PBF1211A	C99-3	SW PMP RM EXH FAN 3	150	HFB 3150	E6/2	30	HFB 3030	E6/5	NO	1,21
	F12D	2PBF1236A	C99-4	SW PMP RM EXH FAN 4	150	HFB 3150	E6/2	30	HFB 3030	E6/5	NO	1,21
	F15	2PBF105A	C1-3	CACS FAN 3 LRGST LOAD	480	AK-25/SST	E4/2	N/A	NONE	E6/1	YES	1
	F16A	2PBF1616F	MU6420	MU32 BYPASS VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/5	YES	1

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DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	F16A	2PBF1617D	MU3971	RC MU PUMP SUCT VLV	600	AK-25/SST	E4/2	15	HFB 3015	E6/5	YES	1
	F16A	2PBF1620A	F16B	480VAC MCC	600	AK-25/SST	E4/2	250	LB 250	E6/5	YES	6
	F16A	2PBF1622A	RE4598BA	STA VENT EFF RAD MON	600	AK-25/SST	E4/2	15	HFB 3015	E6/5	YES	6
	F16A	2PBF1623A	RE4598BB	STA VENT EFF RAD MON	600	AK-25/SST	E4/2	15	HFB 3015	E6/5	YES	6
	F16A	2PBF1624A	XY2	FEEDER CVTXY2 (86-0272)	600	AK-25/SST	E4/2	40	HFB 3040	E6/5, DCN 81	YES	1
	F16A	2PBF1625A	XY4	FEEDER CVTXY4 (86-0272)	600	AK-25/SST	E4/2	40	HFB 3040	E6/5, DCN 83	YES	1
	F16B	2PBF1609A	RE4597BA	CTMT RAD MON	250	LB 250	E6/5	15	HFB 3015	E6/5	NO	6,21
	F16B	2PBF1610A	RE4597BB	CTMT RAD MON	250	LB 250	E6/5	15	HFB 3015	E6/5	NO	6,21
	F7	BPBF703A	MC1390	INST AIR COMP	1760	K-1600S	E4/3	600	K-600S	E4/3	YES	6,27
	F7	BPBF707A	F71	480V AC MCC	1760	K-1600S	E4/3	600	K-600S	E4/3,B6-425-BA	YES	1,27
	F71	BPBF7103A	MV6397	MDFP ISO VALVE (MAN)	600	AK-25/SST	E4/3	15	HFB 3015	E5/2	YES	6
	F71	BPBF7104A	MV6398	MDFP ISO VALVE (MAN)	600	AK-25/SST	E4/3	15	HFB 3015	E5/2	YES	6
	F71	BPBF7105A	C3410	EIAC CLOSED COOLING LOOP	600	AK-25/SST	E4/3	40	HFB 3040	E5/2	YES	6
A	F71	BPBF7114A	P242-1	MDFP AUX LUBE OIL PUMP	600	AK-25/SST	E4/3	15	HFB 3015	E5/2	YES	1
	F71	BPBF7115A	MP2562	STA AIR CMPSR 2 LO PUMP	600	AK-25/SST	E4/3	15	HFB 3015	E5/2	YES	6
A	F71	BPBF7117A	Y3401	DIST PANEL Y3401	600	AK-25/SST	E4/3	50	HFB 3050	E5/2, 87-1193	NO	6,22
	F71	BPBF7118A	S405B	ROOM AIR COND ROOM 334B	600	AK-25/SST	E4/3	25	HFB 3025	E5/2, 87-1193	YES	6
	RC3702	(2CY214A)	VARIOUS	EDG SEQ, H/L SG SET	5	A25X5(A)	E641A/2A	3	A6Y3-1(A)	E518, E33-35	ACC	7,16
	RC3704	(1CY117A)	VARIOUS	CCWS SWGR TK LR3757	5	A25X5	E641A/1A	3	A60X3(A)	E544B/5, E33-45	ACC	7,16
	RC3706	(1CY117B)	VARIOUS	LARGEST LOAD	5	A25X5	E641A/1A	SPARE	A60X3(A)	E739, E33-60	ACC	7,16
	RC4604	(1CD1P20B)	VARIOUS	VAR,LARGEST LOAD (D1P)	30	A2Y30-1	E640A/1A	3	A6Y3-1	E771, E33-69	YES	7
	RC4605	(2CD2P20C)	VARIOUS	LARGEST LOAD	30	A2Y30-1	E641A/2A	3	A6Y3-1	E772,E33-70,E60B/39A	YES	7
	RC4606	(2PD2P12A)	VARIOUS	VAR, LARGEST LOAD (D2P)	30	A2Y30-1	E640A/2A	3	A6Y3-1	E914, E330-3 TO -6	YES	1
	RC4607	2CV4632E	V4632	SAMPLE VALVE(SINGLE LOAD)	3	A2Y3-1(A)	E568/47B	3	A2Y3-1(A)	E568/47B	ACC	5,23
	RC4801	(1PD1P12A)	VARIOUS	VAR, LARGEST LOAD USED	30	A2Y30-1	E640A/1A	3	A6Y3-1	E913, E330-14,-15	YES	1
	Y1	1CY103A	C5762B	PROCESS & RAD MON CABINET	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	2,26
A	Y1	1CY104A	C670B	CTRM EMERGENCY HVAC CONTR	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	1,26
A	Y1	1CY104B	C6714	CTRM EMERGENCY HVAC CONTR	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	1,26
	Y1	1CY106A	C5762E	RPS-1 CABINET N1-N12	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	1,9,26
A	Y1	1CY107A	C5762D	SFAS CH.1 LOGIC PANEL	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	1,9,26
	Y1	1CY108A	C3630	CONT POWER TO AUX SD PANE	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	1,3,26
	Y1	1CY108B	C3628	CONT POWER ESS METER HPI	40	HFB 3040	E6/5	N/A	NONE	E641A/1A, E200B	YES	1,26
	Y1	1CY110A	D1	METER RELAY AT D1	40	HFB 3040	E6/5	10	A25X10	E641A/1A	YES	2,26
	Y1	1CY110B	RC4604	NON SSD RELAYS	40	HFB 3040	E7	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY111A	ASH5358A	CL2 MONITOR ASH5358A	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	6,26
	Y1	1CY111B	ASH4863A	CL2 MONITOR ASH4863A	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	6,26
	Y1	1CY111C	CFPP19Q	F/P PANEL CFPP19Q	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	6,26
A	Y1	1CY112A	C5716	CTRM IND LTS HPI FLOW	40	HFB 3040	E6/5	10	A25X10	E641A/1A, 87-1148	YES	1,26
	Y1	1CY112B	C5763B	POST ACCIDENT MOD	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	7,26
	Y1	1CY112C	C5708	CTRM IND LIGHTS	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	7,26
	Y1	1CY113A	CFPB3Q	BWST INST HEAT TRACING	40	HFB 3040	E6/5	15	A25X15	E641A/1A	YES	6,26
	Y1	1CY114A	RC3701	RELAY CABINET RC3701	40	HFB 3040	E65	15	A25X15	E641A/1A	YES	5,26
	Y1	1CY114B	CFPP17Q	F/P PANEL	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	6,26
A	Y1	1CY115B	C5761A	SFRCS CH.1 LOGIC PANEL	40	HFB 3040	E6/5	30	A25X30	E641A/1A	YES	1,9,26
	Y1	1CY117A	C5717	CONT POWER SV IND LIGHTS	40	HFB 3040	E65	5	A25X5	E641A/1A	YES	5,26
	Y1	1CY117A	RC3704	NON SSD RELAYS	40	HFB 3040	E6/5	5	A25X5	E641A/1A	YES	7,26

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APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	Y1	1CY117B	RC3706	NON SSD RELAYS	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	7,26
	Y1	1CY117C	CDE-118-1	NON SSD CONT PWR	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	7,26
	Y1	1CY117D	CDE-118-2	CONT POWER DH12 INTLK	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	1,26
	Y1	1CY118A	PDY5000B	PDY5000B	40	HFB 3040	E6/5	30	A25x30	E641A/1A	YES	2,26
	Y1	1CY118B	PDY5000C	PDY5000C	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY118C	TY5443	TY5443	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY118D	C5784A	ARTS CABINET C5784A	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY119A	C3801	CTMT HYDROGEN SYS PANEL	40	HFB 3040	E6/5	10	A25x10	E641A/1A	YES	6,26
	Y1	1CY120A	RC3607	RELAY CABINET RC3607	40	HFB 3040	E6/5	5	A25x5	E641A/1A	YES	2,26
	Y1	1CY120B	RC3601	RELAY CABINET RC3601	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY120C	RC3605	RELAY CABINET RC3605	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
	Y1	1CY120D	YL1	YL1	40	HFB 3040	E6/5	NA	NONE	E641A/1A, E200B	YES	2,26
A	Y1	1CY121A	C5762A	SFRCS CH.3 LOGIC PANEL	40	HFB 3040	E6/5	5	A60X5(A)	E641A/1B	YES	1,9
	Y1	1CY122A	CFPP100	CL2 ANALYZER HEAT TRACE	40	HFB 3040	E6/5	15	A25x15	E641A/1B	YES	6,26
A	Y1	1PY105A	C3615	EDG1-1 PANEL (NORM)	40	HFB 3040	E6/5	15	A25x15	E641A/1A	YES	1,26
	Y1	ACY1VMA	E16277	REMOTE VOLTMETER AT C5715	40	HFB 3040	E6/5	2	A25x2	E641A/1A	YES	6,26
A	Y1A	1CY103AA	L1I4618	CTMT NOR SUMP LVL	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1CY104AA	C3645	CONT POWER TO AUX FW CONT	40	HFB 3040	E6/5	20	A25x20	E908A	YES	1,26
	Y1A	1CY107AA	C5799	POST ACCIDENT MONITORING	40	HFB 3040	E6/5	15	A25x15	E908A	YES	1,26
	Y1A	1CY108AA	NY5874B	NEUTRON FLUX MONITORING C	40	HFB 3040	E6/5	10	A25x10	E908A	YES	1,26
	Y1A	1CY108AB	C4808	NEUTRON FLUX MON CAB	40	HFB 3040	E6/5	NA	NONE	E908A	YES	5,26
	Y1A	1CY109AA	C5799	POST ACCIDENT MONITORING	40	HFB 3040	E6/5	10	A25x10	E908A	YES	5,26
	Y1A	1CY115AA	C5763B	POST ACC MON	40	HFB 3040	E6/5	20	A25x20	E908A	YES	2,26
	Y1A	1CY1A105A	C5763A	POST ACCIDENT MONITIORING	40	HFB 3040	E6/5	20	A25x20	E908A	YES	1,9,26
	Y1A	1PY111AA	C5762G	SAFETY GRADE INST CAB	40	HFB 3040	E6/5	20	A25x20	E908A, E1032	YES	2,26
	Y1A	1PY112AA	C5603	VENT STACK RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY113AA	RC4801	RELAY CABINET RC4801	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY114AA	RE4597AA	CTMT RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY116AA	RT4597AA	CTMT RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY117AA	RE4598AA	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY118AA	RT4598AA	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2
	Y1A	1PY119AA	RE4597AB	CTMT RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY120AA	RT4597AB	CTMT RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY121AA	RE4598AB	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25x10	E908A	YES	2,26
	Y1A	1PY122AA	RT4598AB	STA EFF RAD MON	40	HFB 3040	E6/5	2	A25x2	E908A	YES	2,26
	Y1A	ACY1AVMA	E16277	REMOTE VOLT METER (C5715)	40	HFB 3040	E6/5	15	A25x15	E641/2A	YES	2,26
	Y2	2CY203A	C5755B	PROCESS & RAD MON CABINET	40	HFB 3040	E6/5	15	A25x15	E641/2A	YES	1,2,26
A	Y2	2CY204A	C6715	CTRM EMERGENCY HVAC CONTR	40	HFB 3040	E6/5	NA	NONE	E641/2A, E200B(J)	YES	1,2,26
A	Y2	2CY204B	C6709	CTRM EMERGENCY HVAC CONTR	40	HFB 3040	E6/5	15	A25x15	E641/2A	YES	1,9,26
	Y2	2CY206A	C5755E	RPS-2 CABINET N1	40	HFB 3040	E6/5	15	A25x15	E641/2A	YES	1,9,26
A	Y2	2CY207A	C5755D	SFAS CH.2 LOGIC PANEL	40	HFB 3040	E6/5	15	A25x15	E641/2A	YES	1,3,26
	Y2	2CY208A	C3630	CONT POWER TO AUX SD PANE	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	1,26
	Y2	2CY208B	C3629	CONT POWER ESS METER HPI	40	HFB 3040	E6/5	2	A25x2	E641/2A	YES	6,26
	Y2	2CY210A	82	GE METER RELAY TY 195	40	HFB 3040	E6/5	10	A25x10	E641/2A, 87-1148	YES	1,26
	Y2	2CY211A	C5716	CTRM IND LIGHTS, HPI FLOW	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	7,26
	Y2	2CY211B	C5705	CONT POWER IND LTS	40	HFB 3040	E6/5					

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APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	Y2	2CY211C	C5709	CTRM IND LIGHTS	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	7,26
	Y2	2CY212A	C5717	CONT POWER SV IND LIGHTS	40	HFB 3040	E6/5	3	A25X3	E641/2A	YES	5,26
	Y2	2CY212B	C5755A	IND LIGHTS	40	HFB 3040	E6/5	NA	NONE	E641/2A, E200B(J)	YES	7,26
	Y2	2CY213A	ASH5358B	CL2 MONITOR ASH5356B	40	HFB 3040	E6/5	15	A25X15	E641/2A	YES	6,26
	Y2	2CY213B	ASH4863B	CL2 MONITOR ASH4863B	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	6,26
	Y2	2CY213C	CFPP20Q	F/P PANEL CFPP20Q	40	HFB 3040	E6/5	NA	NONE	E641/2A, E200B(J)	YES	6,26
A	Y2	2CY214A	RC3702	SG LEVEL SET, LGST	40	HFB 3040	E6/5	5	A25X5	E641/2A	YES	6,26
	Y2	2CY214B	RC4605	NON SSD RELAYS	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	6,26
	Y2	2CY214C	CDF-11A-1	CONTROL DISCONNECT TRANSF	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	5,26
	Y2	2CY214D	CDF-11A-1	CONTROL DISCONNECT TRANS	40	HFB 3040	E6/5	N/A	NONE	E641/2A, E200B(J)	YES	5,26
	Y2	2CY215B	C5792A	SFRCS CH.2 LOGIC PANEL	40	HFB 3040	H6/5	30	A25X30	E641/2A	YES	1,9,26
	Y2	2CY216A	RC3705	RELAY CABINET	40	HFB 3040	E6/6	5	A25X5	E641/2A	YES	5,26
	Y2	2CY216B	RC3703	NON SSD RELAYS	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	6,26
	Y2	2CY216C	WF60	H2 DILUT FLT HTR	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	9,26
	Y2	2CY217A	PDY5014B	FPDY5014B	40	HFB 3040	E6/5	30	A25X30	E641/2A	YES	2,26
	Y2	2CY217B	PDY5014C	FPDY5014C	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	2,26
	Y2	2CY217C	FTY5444	FTY5444	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	2,26
	Y2	2CY217D	C5784B	ARTS CABINET C5784B	40	HFB 3040	E6/5	NA	NONE	E641/2A, E200B(J)	YES	2,26
	Y2	2CY218A	C3801	CTMT HYDROGEN SYS PANEL	40	HFB 3040	E6/5	15	A25X15	E641/2A	YES	2,26
	Y2	2CY218B	CFPP18Q	F/P PANEL CFPP18Q	40	HFB 3040	E6/5	NA	NONE	E641/2A, E200B(J)	YES	2,26
	Y2	2CY219A	RC3608	RELAY CABINET RC3608	40	HFB 3040	E6/5	5	A25X5	E641/2A	YES	2,26
	Y2	2CY219B	RC3602	RELAY CABINET RC3602	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	2,26
	Y2	2CY219C	RC3606	RELAY CABINET RC3606	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	2,26
	Y2	2CY219D	YL2	YL2	40	HFB 3040	E6/5	NA	NONE	E641/2A	YES	2,26
A	Y2	2CY220A	CFP04Q	BWST INSTR HEAT TRACING	40	HFB 3040	E5/6	15	A25X15	E641/2A	YES	6,26
	Y2	2CY221B	C5792	SFRCS RELAY CH 2	40	HFB 3040	E6/5	5	A60X5(A)	E641/2B	YES	1,9,26
A	Y2	2CY222A	CFPP11Q	CL2 ANALYZER HEAT TRACE	40	HFB 3040	E6/5	15	A25X15	E641/2B	YES	6,26
	Y2	2PY205A	C3616	EDG1-2 PANEL LIGHTS	40	HFB 3040	E6/5	15	A25X15	E641/2A	YES	1,26
A	Y2	BCY2VMA	E16282	REMOTE VOLTMETER AT C5715	40	HFB 3040	E6/5	2	A25X2	E641/2A	YES	6,26
	Y2A	2CY203AA	L114617	CTMT SUMP LEVEL	40	HFB 3040	E6/5	10	A25X10	E909A	YES	5,26
	Y2A	2CY204AA	C4625	CONT PWR AUX FW CONT PNL	40	HFB 3040	E6/5	20	A25X20	E909A	YES	1,16
	Y2A	2CY207AA	C5798	POST ACCIDENT MONITORING	40	HFB 3040	E6/5	15	A25X15	E909A	YES	1,26
	Y2A	2CY208AA	NY5875B	NEUTRON FLUX MON	40	HFB 3040	E6/5	10	A25X10	E-909A	YES	1,26
	Y2A	2CY208AB	C4602	NEUTRON FLUX MON	40	HFB 3040	E6/5	N/A	NONE	E909A, E200B	YES	1,26
	Y2A	2CY209AA	C5798	POST ACCIDENT MONITORING	40	HFB 3040	E6/5	10	A25X10	E909A	YES	5,26
	Y2A	2CY215AA	C5755A	POST ACCIDENT MON	40	HFB 3040	E6/5	20	A2Y20-1	E909A	YES	6,26
	Y2A	2CY2A205A	C5755G	POST ACCIDENT MONITIORING	40	HFB 3040	E6/5	20	A25X20	E909A	YES	1,9,26
	Y2A	2PY211AA	C5755H	SAFETY GRADE INSTR CAB	40	HFB 3040	E6/5	20	A25X20	E909A	YES	6,26
	Y2A	2PY212AA	C5803A	VENT STACK RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY213AA	RC4606	RELAY CABINET RC4606	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY214AA	RE4597BA	CTMT RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY216AA	RT4597BA	CTMT RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY217AA	RE4598BA	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY218AA	RT4598BA	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY219AA	RE4597BB	CTMT RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26
	Y2A	2PY220AA	RT4597BB	CTMT RAD MON	40	HFB 3040	E6/5	10	A25X10	E909A	YES	6,26

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DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	Y2A	2PY221AA	RE4598BB	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25x10	E909A	YES	6,26
↓	Y2A	2PY222AA	RE4598BB	STA EFF RAD MON	40	HFB 3040	E6/5	10	A25x10	E909A	YES	6,26
	Y3	3CY307A	C5763D	SFAS CH.3 LOGIC PANEL	40	HFB 3040	E6/5	15	A25x15	E641/3A	YES	1,26
	Y3	3CY308A	C5763F	RPS-3 CABINET	40	HFB 3040	E6/5	15	A25x15	E641/3A	YES	6,26
	Y3	3CY309A	RC3603	RELAY CABINET RC3603	40	HFB 3040	E6/5	5	A25x5	E641/3A	YES	5,26
	Y3	3CY310A	CFP05Q	BWST HEAT TRACING	40	HFB 3040	E6/5	15	A25x15	E641/3A	YES	6,26
	Y3	3CY312A	C5784C	ARTS CABINET	40	HFB 3040	E6/5	30	A25x30	E641/3A	YES	6,26
	Y3	3CY313A	C5760A	CTRM CABINET	40	HFB 3040	E6/5	15	A25x15	E641/3A	YES	2,26
A	Y3	3PY305A	C3615	EDG1-1 PANEL (ALT)	40	HFB 3040	E6/5	15	A25x15	E641/3A	ES	5,26
A	Y3	ACY3VMA	E16281	REMOTE VOLTMETER AT C5715	40	HFB 3040	E6/5	2	A25x2	E641/3A	/ES	6,26
A	Y4	2CY419A	C5705	PORV IND LT MCB	40	HFB 3040	E6/5	3	A25x3	E641A/4A, DCN 1362	YES	1,9,26
A	Y4	4CY407A	C5756D	SFAS LOGIC ACTUATED CH2	40	HFB 3040	E6/5	15	A25x15	E641A/4A	YES	1,26
	Y4	4CY408A	C5756F	RPS-4 CABINET	40	HFB 3040	E6/5	15	A25x15	E641A/4A	YES	6,26
	Y4	4CY409A	C5764A	SEISMIC RECORDING SYS	40	HFB 3040	E6/5	3	A25x3	E641A/4A	YES	6,26
	Y4	4CY410A	RC3604	RELAY CABINET RC3604	40	HFB 3040	E6/5	5	A25x5	E641A/4A	YES	6,26
	Y4	4CY411A	CFP06Q	BWST HEAT TRACE CABINET	40	HFB 3040	E6/5	15	A25x15	E641A/4A	YES	6,26
	Y4	4CY412A	C5784D	ARTS CABINET C5784D	40	HFB 3040	E6/5	30	A25x30	E641A/4A	YES	6,26
C	Y4	4CY414A	C5756G	CTRM CABINET	40	HFB 3040	E6/5	15	A25x15	E641A/4A	YES	2,26
A	Y4	4PY405A	C3616	EDG1-2 PANEL LIGHTS (ALT)	40	HFB 3040	E6/5	15	A25x15	E641A/4A	YES	5,26
	Y4	BCY4VMA	E16278	REMOTE VOLTMETER AT C5715	40	HFB 3040	E6/5	2	A25X2	E641A/4A	YES	6,26
A	YAU	ACYAU13A	C5754K	EPF MULTIPLEXER CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
↓	YAU	ACYAU14B	J15708	TSC DATALINK	300	A2Y300-1(A	E7	NA	NONE	E643/1, E200B(J)	YES	6
	YAU	ACYAU14C	J15707	TSC DATALINK	300	A2Y300-1(A	E7	NA	NONE	E643/1, E200B(J)	YES	6
	YAU	ACYAU20A	C4603	CRD MISC TRIP CONFIRM 2	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU21A	C4801Y	CRD MISC API & LOGIC 2	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU22A	C1702	PANEL	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	ACYAU23A	C4801H	CRD MISC TRANSFER	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU24A	C4101	H2 DETECTOR CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU25A	C5761B	ICS Y BUS FEED (ALT)	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
C	YAU	ACYAU27B	C5757D	MFPT 1-1 CIRC	300	A2Y300-1(A	E7	10	A2Y10-1	E643/1, E200B(J)	YES	6
	YAU	ACYAU28A	C5764G	ENVIRONMENTAL MONITOR SYS	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU29A	R3004	RACK	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU29B	R3002	RACK	300	A2Y300-1(A	E7	NA	NONE	E643/1	YES	6
	YAU	ACYAU29C	R3003	RACK	300	A2Y300-1(A	E7	NA	NONE	E643/1	YES	6
C	YAU	ACYAU29E	NA116859	RACK	300	A2Y300-1(A	E7	NA	NONE	E643/1	YES	6
A	YAU	ACYAU29F	R2622	RACK	300	A2Y300-1(A	E7	N/A	NONE	E643/1, E200B(J)	YES	6
	YAU	ACYAU30A	C5765E	PROCESS & RADIATION MON	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	ACYAU31A	C3403	STATION AIR COMPRESSOR 1	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU32A	C5715	DC & INSTR AIR BKR IND	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	ACYAU33A	C6710-12	MOTOROLA TRANSCEIVERS	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU34A	C3002	DIESEL FIRE PUMP CTRL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU35A	RC3717	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU35B	RC3715	RELAY CABINET	300	A2Y300-1(A	E7	N/A	NONE	E643/2	YES	5
	YAU	ACYAU35C	RC1760	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU36A	RC3005	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU36B	RC3003	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6

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DAVIS BESSE — APPENDIX C-3 — AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
	YAU	ACYAU36C	RC3001	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU37A	RC4311	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU38A	C3610	SUPPLEMENTARY PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU39A	C5722	MAIN CTRL PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU40A	RC2404	RELAY CABINET	300	A2Y300-1(A	E7	30	A2Y30-1	E643/2	YES	6
	YAU	ACYAU40B	R2204	LOCAL ANNUNCIATOR	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU41A	RC2825	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU41B	R1801	RACK	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42A	JT4722	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU42C	JT5785	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42D	PDS8627A	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42E	C5401	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42F	C5402	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42G	C5403	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42H	C5215	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42K	JT4801	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42L	JT4908	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42M	JT4909	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42N	C5785B	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU42P	C4709	FIRE PROTECTION SYSTEM	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU43A	C5718	MAIN CTRL BOARD	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU44A	C5721	FEEDWATER PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU45A	VARIOUS	RECEPTACLE	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2,DCNs 28,51,58	YES	6
	YAU	ACYAU46A	C5765F	PROCESS & RADIATION MON	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU46B	C5781	PROCESS & RADIATION MON	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU47A	C5719	CRT	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2, DCN 41	YES	6
	YAU	ACYAU48A	C5770	COMP UNIT A,CPU,PRINTER	300	A2Y300-1(A	E7	30	A2Y30-1	E643/2, DCN 55	YES	6
	YAU	ACYAU49A	C5708	MAIN CTRL BOARD	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU49B	C5706	MAIN CONTROL BOARD	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU50A	C5772C	COMPUTER MAIN FRAME	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU50B	C5772F	COMPUTER MAIN FRAME	300	A2Y300-1(A	E7	NA	NONE	E643/2	YES	6
	YAU	ACYAU52A	C5751C	ETOP 2 FANS	300	A2Y300-1(A	E7	20	A2Y20-1	E643/2	YES	6
	YAU	ACYAU53A	C5720	MAIN CTRL BOARD	300	A2Y300-1(A	E7	30	A2Y30-1	E643/2	YES	6
	YAU	APYAU02A	Y4501	FUSE PANEL Y4501	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/1	YES	6
	YAU	APYAU04A	C5765A	PROCESS & RADIATION MON	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/1	YES	6
	YAU	APYAU05A	Y3601	FUSE PANEL Y3601	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/1	YES	6
A	YAU	APYAU07A	YATS4601	C4601C/5753C	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/1, DCN 52	YES	6
	YAU	APYAU08A	C5754F	STATION ANNUNCIATOR	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	APYAU09A	C5758A	BUFFER CABINET	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	APYAU11A	U500	MAIN COMMUNICATION BOX	300	A2Y300-1(A	E7	60	A2Y60-1	E643/1	YES	6
	YAU	APYAU12A	C5758C	MISC ELECTRONIC CTRL CAB	300	A2Y300-1(A	E7	60	A2Y60-1	E643/1	YES	6
	YAU	APYAU15A	C5758B	DIAGNOSTIC CABINET	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	APYAU16A	C5772E	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	6
	YAU	APYAU17A	C5772B	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	20	A2Y20-1	E643/1	YES	6
	YAU	APYAU18A	C5772A	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	60	A2Y60-1	E643/1	YES	6
A	YAU	APYAU19A	C5759C	INST POWER NNI-X BUS(ALT)	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	1,9

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BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	YAU	APYAU26A	C5760D	CONT POWER UNIT	300	A2Y300-1(A	E7	30	A2Y30-1	E643/1	YES	1,9
	YBU	BCYBU19A	C1702	PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU20A	C4301	GEN VOLT REG CAB	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU21A	C3303	GEN COOL SYS CAB	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU23A	C5715	DC & INSTR BKR STATUS IND	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU23B	C5718	DC & INSTR BKR STATUS IND	300	A2Y300-1(A	E7	N/A	NONE	E643/3	YES	6
	YBU	BCYBU24A	C4801Y	CRD MCS API & LOGIC 1	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU25A	C4801K	CRD MCS TRANSFER	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU27A	C4606	CRD MCS TRIP CONFIRM 1	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU28A	C5706	CRD MCS GROUP METERS	300	A2Y300-1(A	E7	10	A2Y10-1	E643/3	YES	5
	YBU	BCYBU29A	C5777	COMP STA,VIDEO & PRINT B	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU30A	C5301	CROSS WATT HR METER CAB	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU31A	C5720	MAIN CTRL BOARD	300	A2Y300-1(A	E7	30	A2Y30-1	E643/3, DCN 29	YES	6
	YBU	BCYBU31B	C5719	MAIN CTRL BOARD	300	A2Y300-1(A	E7	NA	NONE	E643/3, DCN 29	YES	6
	YBU	BCYBU32A	C5770	COMP DISC UNIT B, CPU B	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BCYBU33A	C5757C	TURBINE INSTR CABINET	300	A2Y300-1(A	E7	20	A2Y20-1(A)	E643/4	YES	6
	YBU	BCYBU34A	C5752	COMPUTER LAIP	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU35A	C5757D	MFPT CTRM CAB	300	A2Y300-1(A	E7	10	A2Y10-1	E643/4	YES	6
	YBU	BCYBU36A	C3404	STATION AIR COMPRESSOR 2	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU37A	RC4410	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU37B	RC4401	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU37C	RC2304	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU37D	FE13709	FLOW INDICATOR	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU38A	C5754H	LOAD FREQ CTRL	300	A2Y300-1(A	E7	20	A2Y20-1(A)	E643/4	YES	6
	YBU	BCYBU39A	C5723	DIGITAL FREQ IND	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU41A	RC1761	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU42A	RC3006	RELAY CABINET	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	6
	YBU	BCYBU42B	RC3004	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU42C	RC3002	RELAY CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU43A	RC3718	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU43B	RC3716	RCP CLG RET AUX RLY	300	A2Y300-1(A	E7	N/A	NONE	E643/4	YES	5
	YBU	BCYBU44A	C3611	SUPPLEMENTARY PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU45A	C5722	MAIN CTRL PANEL	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	6
	YBU	BCYBU47A	RC2826	RELAY CABINET	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU48A	C5764B	VIBRATION ACOUSTIC MON	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	6
	YBU	BCYBU48B	C5786	CABINET	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BCYBU49A	C5721	FEEDWATER PANEL	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU50A	C5761B	ICS X BUS	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	6
	YBU	BCYBU52A	C5754F	STATION ANNUNCIATOR	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	6
	YBU	BCYBU52B	J15712	COMM DATA TRANSMISSION	300	A2Y300-1(A	E7	NA	NONE	E643/4, E200B(J)	YES	6
	YBU	BCYBU52C	J15713	COMM DATA TRANSMISSION	300	A2Y300-1(A	E7	NA	NONE	E643/4, E200B(J)	YES	6
	YBU	BCYBU53A	C5708	MAIN CTRL BOARD	300	A2Y300-1(A	E7	20	A2Y20-1	E643/4	YES	6
	YBU	BCYBU53B	C5706	MAIN CONTROL BOARD	300	A2Y300-1(A	E7	NA	NONE	E643/4	YES	6
	YBU	BPYBU02A	C5765C	PROCESS & RADIATION MON	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/3	YES	6
	YBU	BPYBU03A	Y4502	FUSE PANEL Y4502	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/3	YES	6
A	YBU	BPYBU04A	YATS4601	ALTERNATE FEED	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/3, DCN 54, 1377	YES	6

SYMBOLS: ACC = ACCEPTABLE (A) = ASSUMED TYPE

A - Added to FADR
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C - Correction

DAVIS BESSE

APPENDIX C-3

AREA OPTIMIZATION

BREAKER COORDINATION EVALUATION SUMMARY

	POWER SUPPLY	CIRCUIT	COMPONENT	DESCRIPTION	FEEDER RATING	FEEDER TYPE	FEEDER DRAWING	LOAD RATING	LOAD TYPE	LOAD DRAWING	COORDINATED	NOTES
A	YBU	BPYBU05A	Y3602	PANEL Y3600	300	A2Y300-1(A	E7	100	A2Y100-3(A	E643/3	YES	6
	YBU	BPYBU08A	C5757B	EHC SYSTEM	300	A2Y300-1(A	E7	30	A2Y30-1	E643/3	YES	6
	YBU	BPYBU09A	C5758F	MISC ELECTRONIC CTRL CAB	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3	YES	6
	YBU	BPYBU11A	U508	MAIN COMMUNICATION BOX	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3	YES	6
	YBU	BPYBU12A	C5772G	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3	YES	6
	YBU	BPYBU13A	C5772G	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3, DCN 29	YES	6
	YBU	BPYBU14A	C5772D	COMPUTER MAINFRAME	300	A2Y300-1(A	E7	20	A2Y20-1	E643/3	YES	6
	YBU	BPYBU17A	C5751	COMPUTER I/OP 2	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3	YES	6
	YBU	BPYBU18A	C5751	COMPUTER I/OP 2	300	A2Y300-1(A	E7	60	A2Y60-1	E643/3	YES	6
A	YBU	BPYBU22A	C5760D	CONT POWER TO UNIT (ALT)	300	A2Y300-1(A	E7	30	A2Y30-1	E643/3	YES	1,9
	YBU	BPYBU51A	C5759C	INST POWER PNL-X BUS	300	A2Y300-1(A	E7	30	A2Y30-1	E643/4	YES	1,9
	YE1	1PYE101A	HV5329A	EDG RM 1 DAMPER	15	HFB 3015	E6/1	15	HFB 2015	E9	YES	1,24
	YE1	1PYE102A	HV5329B	EDG RM 1 DAMPER	15	HFB 3015	E6/1	15	HFB 2015	E9	YES	1,24
	YE1	1PYE103A	HV5329C	EDG RM 1 DAMPER	15	HFB 3015	E6/1	15	HFB 2015	E9	YES	1,24
	YE1	1PYE106A	HV5305	LV SWGR RM FAN 1 DAMPER	15	HFB 3015	E6/1	15	HFB 2015	E9	YES	1,24
	YE2	1PYE211A	C5761A	SFRCS CH.1 LOGIC PANEL	15	HFB 3015	E9	15	HFB 2015	E9	NO	1,9,24
	YE2	1PYE201A	HV5011A	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE2	1PYE202A	HV5011B	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE2	1PYE203A	HV5011C	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE2	1PYE204A	HV5011D	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE2	1PYE205A	HV5011E	CTMT AIR SMPL RET ISO VLV	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE2	1PYE206A	MC5800A	EMER VNT SYS MOD DMPR 1	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	1PYE207A	MC5060B	EMER VNT SYS MOD DMPR 2	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
A	YE2	1PYE209A	HV5443A	CCWP RM FAN 1 BYPASS DMPR	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	1PYE210A	HV5443B	CCWP RM FAN 1 IN DMPR	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	1PYE211A	HV5443C	CCWP RM OA LOUVER 1	50	HFB 3050	E6/1	15	HFB 3015	E9	NO	6,24
	YE1	2PYE101A	HV5336A	EDG RM 2 DAMPER	15	HFB 3015	E6/2	15	HFB 2015	E9	YES	1,24
	YE1	2PYE102A	HV5336B	EDG RM 2 DAMPER	15	HFB 3015	E6/2	15	HFB 2015	E9	YES	1,24
	YE1	2PYE103A	HV5336C	EDG RM 2 DAMPER	15	HFB 3015	E6/2	15	HFB 2015	E9	YES	1,24
	YE1	2PYE106A	HV5314	LV SWGR RM FAN 2 DAMPER	15	HFB 3015	E6/2	15	HFB 2015	E9	YES	1,24
	YE2	2PYE211A	C5762A	SFRCS CH.2 LOGIC PANEL	15	HFB 3015	E9	15	HFB 2015	E9	NO	1,9,24
	YE2	2PYE201A	HV5020A	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	6,24
	YE2	2PYE202A	HV5010B	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	6,24
	YE2	2PYE203A	HV5010C	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	6,24
	YE2	2PYE204A	HV5010D	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	6,24
	YE2	2PYE205A	HV5010E	CTMT AIR SMPL ISO VLV	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	6,24
	YE2	2PYE206A	MC5014A	EMER VNT SYS MOD DMPR 3	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	2PYE207A	MC5014B	EMER VNT SYS MOD DMPR 4	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
A	YE2	2PYE209A	HV5444A	CCWP RM FAN 2 BYPASS DMPR	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	2PYE210A	HV5444B	CCWP RM FAN 2 IN DMPR	15	HFB 3015	E9	15	HFB 2015	E9	NO	6,24
	YE2	2PYE212A	HV5444C	CCWP RM OA LOUVER 2	50	HFB 3050	E6/2	15	HFB 3015	E9	NO	5,24

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