ATTACHMENT 1 DESIGN CALCULATION COVER SHEET

ATTACHMENT 1 DESIGN CALCULATION COVER SHEET

Title: EPM Calculation 1906-07-06 Task 7.6 NFPA 805 Fire Ignition Frequencies	Calculation Number: NEDC 08-032
System/Structure: FP	CED/EE Number:
Component:	Setpoint Change/Part Eval Number: N/A
Classification:[ ] Essential; [X] Non-Essential	Discipline:
	SQAP Requirements Met? [ ] Yes; [X] N/A
Proprietary Information Included? [ ] Yes; [X] No	

Description:

This calculation estimates the fire ignition frequency for each fire compartment, based on fire ignition frequencies for individual ignition sources located in those compartments. A generic set of fire-ignition frequencies for various generic equipment types from NUREG/CR-6850 was used as a starting point. The fire ignition sources are referred to as "ignition frequency bins", based on plant location and equipment type. The definition of each bin is found in NUREG/CR-6850.

Conclusions and Recommendations:

The fixed ignition results are provided in Attachment A. Table A-1 "Fire Compartment Ignition Frequencies" gives the total fire ignition frequencies (which includes both fixed and transient) for each fire compartment and Table A-2 "Fire Zone Ignition Frequencies" provides the total ignition frequency at the fire zone level. Attachment B provides the detailed fixed ignition source worksheets and Attachment C provides the details of the transient sources analysis.

Rev. Number	Status	Prepared By/Date	Reviewed By/Date	IDVed By/Date	Approved By/Date
0	7	James Blum EPM Inc. 5/5/08	5-7-08 Virgel T. Furr	N/A	5/8/08

Status Codes

1. Active
2. Information Only
3. Pending
4. Superseded or Deleted
5. OD/OE Support Only
6. Maintenance Activity Support Only
7. PRA/PSA

ATTACHMENT 2 DESIGN CALCULATION CROSS-REFERENCE INDEX®[3]

Nebraska Public Power District

DESIGN CALCULATION CROSS-REFERENCE INDEX

ITEM NO.	DESIGN INPUTS	REV. NO.	PENDING CHANGES TO DESIGN INPUTS
1	NUREG/CR-6850, "EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities"	September 2005	
2	Kaplan, "On a 'Two-Stage' Bayesian Procedure for Determining Failure Rates from Experiential Data", IEEE Transactions on Power Apparatus and Systems, Volume PAS-102, pp. 195-202.	1983	
3	ANS Standard BSR/ANS 58.23, FPRA Methodology Standard	April 2006	
4	EPRI Technical Report, "Fire Event Data Base and Generic Ignition Frequency Model for US Nuclear Power Plants"	2002	
5	FAQ 06-0016, "Clarification/enhancement of Ignition Source counting guidance for Electrical Cabinets in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"	1	
6	FAQ 06-0017, "Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"	2	
7	FAQ 06-0018, "Clarification/enhancement of Ignition Source counting guidance for Main Control Board (MCB) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"	1	
8	FAQ 07-0031, "Clarification/enhancement of Ignition Source counting guidance for miscellaneous items in NUREG/CR-6850, supporting NFPA-805 Fire PRA application."	0	
9	RES & EPRI Team Response to FAQ 07-0031 NUREG/CR-6850, EPRI TR-1011989, "Clarification of Miscellaneous Ignition Source Binning Issues"	0 10/11/2007	
10	FAQ 07-0035, "Clarification/enhancement for Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application."	0	
11	SAP Equipment Information		
12	CNS Combustible Loading Calculation	4.1	
13	10CFR50 Appendix R Post-Fire Safe and Alternative Shutdown Analysis Report		
14	CNS Fire Hazards Analysis		
15	Fire Hazards Analysis Figure 1, Fire Area Drawing Elevations 859'-9", 877'-6", 881'-9" & 882'-6"	4	

ATTACHMENT 2 DESIGN CALCULATION CROSS-REFERENCE INDEX®[3]

ITEM NO.	DESIGN INPUTS	REV. NO.	PENDING CHANGES TO DESIGN INPUTS
16	Fire Hazards Analysis Figure 2, Fire Area Drawing Elevation 903'-6".	7	
17	Fire Hazards Analysis Figure 3, Fire Area Drawing Elevation 918'-0"	5	
18	Fire Hazards Analysis Figure 4, Fire Area Drawing Elevation 932'-6"	5	
19	Fire Hazards Analysis Figure 5, Fire Area Drawing Elevations 958'-3", 976'-0" & 1001'-0"	4	
20	Fire Hazards Analysis Figure 6, Fire Area Drawing Miscellaneous Buildings Elevation 903'-6"	3	
21	Drawing 2050, General Arrangement Turbine Building Basement Floor Plan	N12	
22	Drawing 2051, Turbine Building General Arrangement Mezzanine Floor Plan	N23	
23	Drawing 2052, General Arrangement Turbine Building Operating Floor Plan	N30	
24	Drawing 2056, General Arrangement Intake Structure Plan & Sections	N12	
25	Drawing 2059, General Arrangement Reactor Building Plan Below Grade	N05	
26	Drawing 2060, General Arrangement Reactor Building Plan at Elev. 903'-6"	N11	
27	Drawing 2061, General Arrangement Reactor Building Plan at Elev. 931'-6"	N09	
28	Drawing 2062, General Arrangement Reactor Building Plan at Elev. 958'-3"	N06	
29	Drawing 2063, General Arrangement Reactor Building Plan at Elev. 976'-0"	N06	
30	Drawing 2064, General Arrangement Reactor Building Plan at Elev. 1001'-0"	N08	
31	Drawing 2067, General Arrangement Radwaste Building Plans at Elev. 877'-6" & 903'-6"	N10	
32	Drawing 2068, General Arrangement Radwaste Building Plans at Elev. 918'-0" & 934'-0"	N10	
33	Drawing 2072, General Arrangement Augmented Radwaste Building Plans	N03	

ATTACHMENT 2 DESIGN CALCULATION CROSS-REFERENCE INDEX®[3]

Nebraska Public Power District

DESIGN CALCULATION CROSS-REFERENCE INDEX

ITEM NO.	AFFECTED DOCUMENTS	REV. NUMBER

ATTACHMENT 3 AFFECTED DOCUMENT SCREENING

The purpose of this form is to assist the Preparer in screening new and revised design calculations to determine potential impacts to procedures and plant operations.Ⓟ[1]

SCREENING QUESTIONS	YES	NO	UNCERTAIN
1. Does it involve the addition, deletion, or manipulation of a component or components which could impact a system lineup and/or checklist for valves, power supplies (breakers), process control switches, HVAC dampers, or instruments?	[ ]	[X]	[ ]
2. Could it impact system operating parameters (e.g., temperatures, flowrates, pressures, voltage, or fluid chemistry)?	[ ]	[X]	[ ]
3. Does it impact equipment operation or response such as valve closure time?	[ ]	[X]	[ ]
4. Does it involve assumptions or necessitate changes to the sequencing of operational steps?	[ ]	[X]	[ ]
5. Does it transfer an electrical load to a different circuit, or impact when electrical loads are added to or removed from the system during an event?	[ ]	[X]	[ ]
6. Does it influence fuse, breaker, or relay coordination?	[ ]	[X]	[ ]
7. Does it have the potential to affect the analyzed conditions of the environment for any part of the Reactor Building, Containment, or Control Room?	[ ]	[X]	[ ]
8. Does it affect TS/TS Bases, USAR, or other Licensing Basis documents?	[ ]	[X]	[ ]
9. Does it affect DCDs?	[ ]	[X]	[ ]
10. Does it have the potential to affect procedures in any way not already mentioned (refer to review checklists in Procedure EDP-06)? If so, identify:	[ ]	[X]	[ ]

_____

_____

_____

If all answers are NO, then additional review or assistance is not required.

If any answers are YES or UNCERTAIN, then the Preparer shall obtain assistance from the System Engineer and other departments, as appropriate, to determine impacts to procedures and plant operations. Affected documents shall be listed on Attachment 2.

Nebraska Public Power District

DESIGN CALCULATIONS SHEET

PURPOSE:

To estimate the fire ignition frequencies for each fire compartment and ignition source, including both fixed sources and transient sources

ASSUMPTIONS:

The analysis model described in this task is based on the following assumptions as noted in NUREG/CR-6850:

- Fire ignition frequencies remain constant over time;
- Among the plants, the generic ignition frequency is the same for the same equipment type, regardless of differences in the quantity and characteristics of the equipment type that may exist among the plants;
- Within each plant, the likelihood of fire ignition is the same across an equipment type. For example, pumps are assumed to have the same fire ignition frequency regardless of size, usage level, working environment, etc.

METHODOLOGY:

This task is organized into the following eight steps:

- Mapping plant ignition sources to generic sources,
- Plant fire event data collection and review,
- Plant specific updates of generic ignition frequencies,
- Mapping plant-specific locations to generic locations,
- Location weighting factors,
- Fixed fire ignition source counts,
- Ignition source weighting factors, and
- Ignition source and compartment fire frequency evaluation.

CONCLUSION:

The fixed ignition results are provided in Attachment A. Table A-1 “Fire Compartment Ignition Frequencies” gives the total fire ignition frequencies (which includes both fixed and transient) for each fire compartment and Table A-2 “Fire Zone Ignition Frequencies” provides the total ignition frequency at the fire zone level. Attachment B provides the detailed fixed ignition source worksheets and Attachment C provides the details of the transient sources analysis.

REFERENCES:

- NUREG/CR-6850, EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities, September 2005.
- Kaplan, “On a ‘Two-Stage’ Bayesian Procedure for Determining Failure Rates from Experiential Data”, IEEE Transactions on Power Apparatus and Systems, Volume PAS-102, 1983, pp. 195-202.
- ANS Standard BSR/ANS 58.23, FPRA Methodology Standard, April 2006.
- EPRI Technical Report, “Fire Event Data Base and Generic Ignition Frequency Model for US Nuclear Power Plants”, 2002.

Nebraska Public Power District

DESIGN CALCULATIONS SHEET

- FAQ 06-0016, Revision 1, "Clarification/enhancement of Ignition Source counting guidance for Electrical Cabinets in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"
- FAQ 06-0017, Revision 2, "Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"
- FAQ 06-0018, Revision 1, "Clarification/enhancement of Ignition Source counting guidance for Main Control Board (MCB) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application"
- FAQ 07-0031, Revision 0, "Clarification/enhancement of Ignition Source counting guidance for miscellaneous items in NUREG/CR-6850, supporting NFPA-805 Fire PRA application."
- RES & EPRI Team Response to FAQ 07-0031 NUREG/CR-6850, EPRI TR-1011989, "Clarification of Miscellaneous Ignition Source Binning Issues", Final Revision 0 – 10/11/2007
- FAQ 07-0035, Revision 0, "Clarification/enhancement for Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application."
- SAP Equipment Information
- CNS Combustible Loading Calculation, Rev. 4.1
- 10CFR50 Appendix R Post-Fire Safe and Alternative Shutdown Analysis Report
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- Drawing 2050, General Arrangement Turbine Building Basement Floor Plan, Rev. N12.
- Drawing 2051, Turbine Building General Arrangement Mezzanine Floor Plan, Rev. N23.
- Drawing 2052, General Arrangement Turbine Building Operating Floor Plan, Rev. N30.
- Drawing 2056, General Arrangement Intake Structure Plan & Sections, Rev. N12.
- Drawing 2059, General Arrangement Reactor Building Plan Below Grade, Rev. N05.
- Drawing 2060, General Arrangement Reactor Building Plan at Elev. 903'-6", Rev. N11.
- Drawing 2061, General Arrangement Reactor Building Plan at Elev. 931'-6", Rev. N09.
- Drawing 2062, General Arrangement Reactor Building Plan at Elev. 958'-3", Rev. N06.
- Drawing 2063, General Arrangement Reactor Building Plan at Elev. 976'-0", Rev. N06.
- Drawing 2064, General Arrangement Reactor Building Plan at Elev. 1001'-0", Rev. N08.
- Drawing 2067, General Arrangement Radwaste Building Plans at Elev. 877'-6" & 903'-6", Rev. N10.
- Drawing 2068, General Arrangement Radwaste Building Plans at Elev. 918'-0" & 934'-0", Rev. N10.
- Drawing 2072, General Arrangement Augmented Radwaste Building Plans, Rev. N03.

ATTACHMENTS:

Attachment A - Fixed Ignition Source Analysis
Attachment B - Detailed Fixed Ignition Source Worksheets
Attachment C - Transient Ignition Sources
Attachment D - Fire Events

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

NFPA 805 Transition Project

EPM Calculation 1906-07-06

Task 7.6: Fire Ignition Frequencies

Revision 0
May 2008

Prepared by: _____ 5/5/08
Timothy Groch

Reviewed by: _____ 5/5/08
James Blum, P.E.

Prepared by Engineering Planning and Management, Inc.

EPM
Engineering Planning and Management, Inc.

Table of Contents

List of Tables

Attachments

1.0 PURPOSE/OBJECTIVE

Cooper Nuclear Station is transitioning to NFPA 805 as part of the design basis for the Fire Protection Program. As part of the transition process, a Fire PRA is required to be developed and quantified for the entire plant. The Fire PRA follows the guidance in NUREG/CR-6850 (Ref. 1) and is performed to the ANS Fire PRA quality standard (Ref. 3). This calculation file documents the work and results of Task 7.6 “Fire Ignition Frequencies”.

The purpose of this task is to estimate the fire ignition frequencies for each fire compartment and ignition source. The ignition frequencies for both fixed sources and transient sources have been determined.

There are number of Frequently Asked Questions (FAQ) outstanding that impact this analysis. As these FAQs are resolved, the analysis and results may need to be revised to address the resolutions.

2.0 DESIGN INPUTS

No design inputs are used in this report. The source of the data that is used in the report is provided in the references listed in Section 5.0.

3.0 EVALUATION

This section describes the procedure for estimating the fire ignition frequencies associated with fire ignition sources. Generic ignition frequencies that can be specialized to plant conditions in terms of plant characteristics and plant fire event experience are provided. Volume 2, Section 6 of NUREG/CR-6850 (Ref. 1) was used as the guideline for the scope of this task.

3.1 General Task Objectives and Approach

This task estimates the fire ignition frequency for each fire compartment, based on fire ignition frequencies for individual ignition sources located in those compartments. A generic set of fire-ignition frequencies for various generic equipment types from NUREG/CR-6850 was used as a starting point. The fire ignition sources are referred to as “ignition frequency bins”, based on plant location and equipment type. The definition of each bin is found in NUREG/CR-6850. Table 3-1 provides the list of these bins and their respective generic mean frequencies. The operating mode (i.e., whether or not the plant is in power operation) used for collecting the fire event data for each bin is also noted in that table. NUREG/CR-6850 Appendix C provides a discussion of the basis of the frequencies and their derivation method. The underlying fire event data in NUREG/CR-6850 was taken from EPRI’s Fire Events Database (FEDB) (Ref. 4). NUREG/CR-6850 allows for single stage Bayesian update of generic frequencies with plant specific data. However, for Cooper, the plant specific fire history did not yield sufficient data to provide a basis for Bayesian update. Bayesian update was not used for Cooper.

Different fire types can be postulated for some of the ignition sources. For example, the bin “plant-wide components/pumps” can refer to both electric and oil fires. In those cases, Table 3-1 provides a split fraction for each fire type. The split fraction was determined according to fire events in the FEDB. Continuing with the plant-wide-components/pumps example, the pump fire events in the database were reviewed and classified as oil or electrical fires. This classification serves as the basis for the split fractions provided in NUREG/CR-6850.

The frequencies provided in Table 3-1 apply to all relevant equipment items within a plant. For example, in the case of "batteries", the mean frequency, 7.5E-04 per reactor year, applies to all battery sets of a unit that provides backup power to the DC buses. If there are two battery sets associated with one unit, the fire frequency per battery set would be 3.75E-04 per reactor year. If there are four battery sets in another one unit plant, the mean frequency at that plant would be 1.875E-04 per reactor year for each battery set.

The quantification process needs the fire frequency associated with a compartment or zone. For this analysis all parameters were evaluated at the zone level. Compartment level frequency is calculated from the sum of all frequencies, $\lambda_{IS,J}$, associated with the ignition sources present in the compartment. The ignition source frequencies $\lambda_{IS,J}$ of individual source are estimated from the following equation:

$$\lambda_{IS,J} = \lambda_{IS} W_L W_{IS,J,L}$$

where:

λ_{IS} ≡ Plant-level fire frequency associated with ignition source IS
W_L ≡ Location weighting factor associated with the ignition source
$W_{IS,J,L}$ ≡ Ignition source weighting factor reflecting the quantity of the ignition source type present in compartment J of location L ($W_{IS,J,L} = W_{IS,L} / n_{IS,J,L}$
$W_{IS,L}$ ≡ Quantity of ignition source type present in the plant
$n_{IS,J}$ ≡ Quantity of ignition source type present in compartment J

Plant-level fire frequencies (i.e., λ_{IS}) are either taken directly from Table 3-1 or after a Bayesian update using plant-specific fire experience. Location weighting factor, W_L, adjusts the frequencies for those situations where a common location (e.g., turbine building) is shared between multiple units. For example, if one turbine building serves two units, then 2.0 will be used for location weighting factor.

The ignition source weighting factor, in general terms, is the fraction of an ignition source type found in a specific compartment. As noted earlier, if there are two battery sets associated with a unit and one of them is in compartment J, 0.5 should be used for the ignition source weighting factor associated with the batteries found in compartment J. Therefore, to establish the ignition source weighting factors, it is necessary to obtain a count for each room of every relevant item (equipment) in the fire PRA equipment list. Also, the combination of the two factors (i.e., $W_L W_{IS,J,L}$) accounts for the fraction of an equipment type in a multiunit site found in a specific compartment of the unit being studied.

The compartment level fire frequency would then be calculated from:

$$\lambda_{J,L} = \sum \lambda_{IS} W_L W_{IS,J,L}$$

(Summed over all individual ignition sources IS in compartment J of location L)

Table 3-1 Fire Frequency Bins and Generic Frequencies

BIN #	Location	Ignition Source	Mode	Generic Freq	Split fractions for Fire Type					
					Electrical	Oil	Transient	Hotwork	Hydrogen	HEAF[1]
1	Battery Room	Batteries	All	7.5E-04	1.00	0.00	0.00	0.00	0.00	0.00
2	Containment PWR	Reactor Coolant Pump	Power	6.1E-03	0.14	0.86	0.00	0.00	0.00	0.00
3	Containment PWR	Transients and hotwork	Power	2.0E-03	0.00	0.00	0.44	0.56	0.00	0.00
4	Control Room	Main Control Board	All	2.1E-03	1.00	0.00	0.00	0.00	0.00	0.00
5	Control/Aux/Reactor Building	Cable fires caused by welding and cutting	Power	1.6E-03	0.00	0.00	0.00	1.00	0.00	0.00
6	Control/Aux/Reactor Building	Transient fires caused by welding and cutting	Power	9.7E-03	0.00	0.00	0.00	1.00	0.00	0.00
7	Control/Aux/Reactor Building	Transients	Power	3.9E-03	0.00	0.00	1.00	0.00	0.00	0.00
8	Diesel Generator Room	Diesel Generators	All	2.1E-02	0.16	0.84	0.00	0.00	0.00	0.00
9	Plant-Wide Components	Air Compressors	All	2.4E-03	0.83	0.17	0.00	0.00	0.00	0.00
10	Plant-Wide Components	Battery Chargers	All	1.8E-03	1.00	0.00	0.00	0.00	0.00	0.00
11	Plant-Wide Components	Cable fires caused by welding and cutting	Power	2.0E-03	0.00	0.00	0.00	1.00	0.00	0.00
12	Plant-Wide Components	Cable Run (Self-ignited cable fires)	All	4.1E-03	1.00	0.00	0.00	0.00	0.00	0.00
13	Plant-Wide Components	Dryers (Note 2)	All	2.6E-03	0.00	1.00	0.00	0.00	0.00	0.00
14	Plant-Wide Components	Electric motors	All	4.6E-03	1.00	0.00	0.00	0.00	0.00	0.00
15	Plant-Wide Components	Electrical Cabinets	All	4.5E-02	1.00	0.00	0.00	0.00	0.00	0.00
16a	Plant-Wide Components	High energy arcing faults (Low-Voltage Panels 480-1000V) (Note 3)	All	4.8E-04	0.00	0.00	0.00	0.00	0.00	1.00
16b	Plant-Wide Components	High energy arcing faults (Medium-Voltage Panels greater than 1000V) (Note 3)	All	1.4E-03	0.00	0.00	0.00	0.00	0.00	1.00
17	Plant-Wide Components	Hydrogen Tanks	All	1.7E-03	0.00	0.00	0.00	0.00	1.00	0.00

BIN #	Location	Ignition Source	Mode	Generic Freq	Split fractions for Fire Type					
					Electrical	Oil	Transient	Hotwork	Hydrogen	HEAF[1]
18	Plant-Wide Components	Junction box	All	1.9E-03	1.00	0.00	0.00	0.00	0.00	0.00
19	Plant-Wide Components	Misc. Hydrogen Fires	All	2.5E-03	0.00	0.00	0.00	0.00	1.00	0.00
20	Plant-Wide Components	Off-gas/H2 Recombiner (BWR)	Power	4.4E-02	0.00	0.00	0.00	0.00	1.00	0.00
21	Plant-Wide Components	Pumps	All	2.1E-02	0.54	0.46	0.00	0.00	0.00	0.00
22	Plant-Wide Components	RPS MG sets	Power	1.6E-03	1.00	0.00	0.00	0.00	0.00	0.00
23a	Plant-Wide Components	Transformers (Oil filled)	All	9.9E-03	0.00	1.00 (Note 4)	0.00	0.00	0.00	0.00
23b	Plant-Wide Components	Transformers (Dry)	All	9.9E-03	1.00 (Note 4)	0.00	0.00	0.00	0.00	0.00
24	Plant-Wide Components	Transient fires caused by welding and cutting	Power	4.9E-03	0.00	0.00	0.00	1.00	0.00	0.00
25	Plant-Wide Components	Transients	Power	9.9E-03	0.00	0.00	1.00	0.00	0.00	0.00
26	Plant-Wide Components	Ventilation Subsystems	All	7.4E-03	0.95	0.05	0.00	0.00	0.00	0.00
27	Transformer Yard	Transformer - Catastrophic	Power	6.0E-03	1.00		0.00	0.00	0.00	0.00
28	Transformer Yard	Transformer - Non Catastrophic	Power	1.2E-02	1.00		0.00	0.00	0.00	0.00
29	Transformer Yard	Yard transformers (Others)	Power	2.2E-03	1.00	0.00	0.00	0.00	0.00	0.00
30	Turbine Building	Boiler	All	1.1E-03	0.00	1.00	0.00	0.00	0.00	0.00
31	Turbine Building	Cable fires caused by welding and cutting	Power	1.6E-03	0.00	0.00	0.00	1.00	0.00	0.00
32	Turbine Building	Main feedwater pumps	Power	1.3E-02	0.11	0.89	0.00	0.00	0.00	0.00
33	Turbine Building	Turbine Generator (T/G) Excitor	Power	3.9E-03	1.00	0.00	0.00	0.00	0.00	0.00
34	Turbine Building	T/G Hydrogen	Power	6.5E-03	0.00	0.00	0.00	0.00	1.00	0.00
35	Turbine Building	T/G Oil	Power	9.5E-03	0.00	1.00	0.00	0.00	0.00	0.00
36	Turbine Building	Transient fires caused by welding and cutting	Power	8.2E-03	0.00	0.00	0.00	1.00	0.00	0.00
37	Turbine Building	Transients	Power	7.4E-03	0.00	0.00	1.00	0.00	0.00	0.00
N/A	Equipment Not Ignition Source	Equipment Not Ignition Source (Note 5)	All	0.0E00	0.00	0.00	0.00	0.00	0.00	0.00

Note 1: See NUREG/CR-6850 (Ref. 1), Appendix M for a description of high-energy arcing fault fires.

Note 2: Bin #13 is not included in Table 6-1 of NUREG/CR-6850 (Ref. 1). However, Bin #13 is described in Appendix C of the same document and was therefore included here.

Note 3: Bins #16a and #16b were originally included in a single Bin #16 in Table 6-1 of NUREG/CR-6850 (Ref. 1). However, based on FAQ #06-0017 (Ref. 6), two separate bins were required to address high energy arc faults for low voltage equipment and also for medium voltage equipment.

Note 4: The event should be considered either as an electrical or oil fire, whichever yields the worst consequences.

Note 5: Bin #N/A is not included in Table 6-1 of NUREG/CR-6850 (Ref. 1). This bin was added to capture plant equipment screened out as ignition sources during plant walkdowns.

3.2 Assumptions

The analysis model described in this task is based on the following assumptions as noted in NUREG/CR-6850:

- Fire ignition frequencies remain constant over time;
- Among the plants, the generic ignition frequency is the same for the same equipment type, regardless of differences in the quantity and characteristics of the equipment type that may exist among the plants;
- Within each plant, the likelihood of fire ignition is the same across an equipment type. For example, pumps are assumed to have the same fire ignition frequency regardless of size, usage level, working environment, etc.

3.3 Input from Other Tasks

This task uses list and boundaries of the plant fire compartments resulting from Task 7.1, Plant Boundary Definition and Partitioning. Equipment information from SAP and information from plant walkdowns was used to facilitate the equipment count and identify their locations.

3.4 Procedure

This task is organized into the following eight steps:

1. Mapping plant ignition sources to generic sources,
2. Plant fire event data collection and review,
3. Plant specific updates of generic ignition frequencies,
4. Mapping plant-specific locations to generic locations,
5. Location weighting factors,
6. Fixed fire ignition source counts,
7. Ignition source weighting factors, and
8. Ignition source and compartment fire frequency evaluation.

3.4.1 Step 1: Mapping Plant Ignition Sources to Generic Sources

For each location, a review of all ignition sources was conducted to verify that every ignition source can be mapped to one of the relevant bins in Table 3-1. It is possible that unique ignition source types could be identified that may not be reflected in the generic frequency model ignition source list. The purpose of this step is to identify such ignition sources.

3.4.2 Step 2: Plant Fire Event Data Collection and Review

The purpose of this task is to examine the fire events in the plant to make two determinations:

1. Are there any unusual fire occurrence patterns in the plant?
2. Is plant-specific fire frequency evaluation warranted?

The generic fire frequencies of Table 3-1 may be updated using plant-specific fire event data in all cases. Per NUREG/CR-6850, to reduce the level of effort, the analysis team may decide to forego this option. Use of the generic fire frequency data is reasonable if an important condition is met: there are no unusual fire occurrence patterns in the plant.

As required in NUREG/CR 6850, the Cooper historical fire events were reviewed for possible outlier frequencies for each ignition bin. Fire events extending back to June 1999 were reviewed. The review and disposition of each fire event is shown in Attachment D. The events were classified as "potentially challenging" or not, in accordance with the criteria established in Section 6 of NUREG/CR 6850. 15 of the 28 event reports were identified as "potentially challenging".

The fire events represent the time period from June 1999 to July 2007. All reactor modes and operating conditions were included. The events line up in each bin as shown below:

Table 3-2 Fire Event Summary

IEF Bin (NUREG/CR-6850)	No. of Events at Cooper	No. of Events from Generic Database	Plant Specific Bin IEF (Point estimate - /ry)	Is plant specific PE outside 5th/95th range of NUREG/CR-6850 Generic IEF	Applicable Criteria that apply to use generic data
6	1	12.6	2.5E-02	N	Not Included Based on Criteria 1 & 2
12	1	11.5	2.5E-02	N	Not Included Based on Criteria 1 & 2
15	2	109	5.0E-02	N	Not Included Based on Criteria 2
21	1	52.0	2.5E-02	N	Not Included Based on Criteria 1 & 2
22	1	3.7	2.5E-02	Y	Not Included Based on Criteria 1
23	1	23.0	2.5E-02	N	Not Included Based on Criteria 1 & 2
24	1	7.3	2.5E-02	Y	Not Included Based on Criteria 1
25	1	12.9	2.5E-02	N	Not Included Based on Criteria 1 & 2
27	1	10.0	2.5E-02	Y	Not Included Based on Criteria 1
35	1	15.5	2.5E-02	N	Not Included Based on Criteria 1 & 2

The use of plant specific data, as indicated in NUREG/CR-6850, page 6-9 should be used "If plant fire event history reveals a repeated set of events associated with an ignition source bin, it is recommended that for those bins, plant specific fire frequencies be estimated. …If there are only a small number of fire events in the plant, use generic fire events frequencies". The decision to use plant specific data was based on 3 criteria. If any of these criteria was applicable to a bin, generic data was used.

Criteria 1: If a bin only had 1 plant specific event, Bayesian update was not used, because 1 event is not sufficient to show a "repeated set of events". A single event is also not sufficient to yield statistically significant results with Bayesian update.

Criteria 2: If the plant specific point estimate IEF for a bin using 40 plant years of experience was within the 5th-95th range of the generic data, it was considered acceptable and Bayesian update was not used.

Criteria 3: If all events for a bin occurred more than 10 years ago, generic data can be used for the frequency. The use of outdated historical evidence is not allowed per ASME-PRA-2003 (is referenced in Fire PRA standard ANS-58.23) Criteria DA-D7. The use of outdated historical evidence is not allowed per ASME-PRA-2003 (is referenced in Fire PRA standard ANS-58.23) Criteria DA-D7.

The "potentially challenging events" events are distributed as follows:

3.4.3 Step 3: Plant Specific Updates of Generic Ignition Frequencies

Step 3 is a Bayesian update of the generic fire frequencies in Table 3-1 by plant specific data on fire events. Step 3 was not performed because of the conclusion of Step 2 and the generic frequencies were used directly.

3.4.4 Step 4: Mapping Plant-Specific Locations to Generic Locations

Fire ignition source bin definition, in addition to equipment type, includes a plant location (see Table 3-1). This step maps plant-specific locations to generic locations. Table 3-4 provides a description of each generic location category to facilitate the mapping process described in this step.

These generic plant locations were derived based on variety of plant constructions and naming practices. Various plant locations were assigned to one of the above-listed generic locations. The ultimate goal of this effort is to map all Cooper fire zones and compartments to one of the above listed generic locations. Therefore, the final outcome of this task is a list of plant locations and their respective generic locations.

Table 3-3 Generic Plant Location Descriptions

Plant Location	Description/Clarification
Battery Room	Plant location(s) where station batteries are located. Does not include other permanent or temporary batteries.
Containment (PWR)	PWR - The building that houses the reactor core and the rest of the primary system. Refueling floor may be part of this location in many U.S. plants.
Control Room	Plant location(s) where controls for normal and emergency plant operations are located. The control room envelope may include additional locations typically referred to as: • Auxiliary Electrical Room or Relay Room, where all plant relay logic circuits are located, • Computer room(s), and • Recreation room or kitchen connected to the control room.
Control/Auxiliary/Reactor Building	The combination of typically contiguous buildings that contain the emergency core cooling, auxiliary feedwater, emergency electrical distribution system, emergency control circuits, and other safe shutdown related systems. It would include the cable spreading room, emergency or safety related switchgear room, relay room, etc. It would not specifically include the containment where main reactor vessel is located and the fuel handling areas of the plant. Note: in BWRs, this location combination is typically referred to as the Reactor Building.
Diesel Generator Rooms	Plant location where emergency diesel generators are located. This does not include temporary diesel generators.
Plant-Wide Components	All plant locations inside the fence other than the containment, fuel handling building, office buildings, maintenance yard, maintenance shop, etc.
Transformer Yard	The area of the yard where station, service, and auxiliary transformers and related items are located. This may also be referred to as the Switchyard.
Turbine Building	Plant building that house turbine generators, its auxiliary systems, and power conversion systems, such as main feedwater, condensate and other systems. Building generally consists of several elevations, including, basement, mezzanine, and turbine deck.

3.4.5 Step 5: Location Weighting Factors

Location weighting factors, W_L, only apply to multiunit sites. For single-unit sites, $W_L = 1.0$ is used.

3.4.6 Step 6: Fixed Fire Ignition Source Counts

To establish an ignition source weighting factor, $W_{IS,J}$, per compartment, it is necessary to obtain the total number of items per the equipment type defined in Table 3-1. The equipment of the entire site is counted in this step.

In the following, a counting method from NUREG/CR-6850 is provided for each generic equipment type listed in Table 3-1.

Bin 1 – Batteries (Battery Room): Each bank of interconnected sets of batteries located in one place (often referred to as Battery Room) should be counted as one battery set. Cells may not be counted individually.

Bin 2 – Reactor Coolant Pump (Containment; PWR): The reactor coolant pumps (RCPs) are distinct devices in PWRs that vary between two and four, depending on primary loop design.

Bin 3 – Transients and Hotwork (Containment; PWR): The ignition source weighting factor of transient fires is estimated using a ranking scheme that takes into account maintenance activities, occupancy level, and storage of flammable materials. See Step 7 for a description of the approach.

Bin 4 – Main Control Board (Control Room): A control room typically consists of one or two (depending on the number of units) main control boards as the central element of the room. The control room may also include plant computers, other electrical cabinets containing plant relays, and instrumentation circuits, a kitchen type area, desks, bookshelves, and etc. Aside from the main control board, the ignition source weighting factors of the remaining ignition sources of the control room should be based on the approach specific to each ignition source.

The response to FAQ 06-0018 (Ref. 7) references Appendix L of NUREG/CR-6850 for the definition of Main Control Board counts as follows:

- The MCB is defined as the collection of control panels inside the MCR of a nuclear power plant from which operators control the plant on a day-to-day basis.
- The MCB would typically include the front face of the “horse shoe” (a typical configuration in most plants), other control or instrumentation display panels that are typically placed in full view of the areas where control room operators are expected to spend most of their time, and other panels in the control room proper that contain control switches or instrumentation displays that are used for plant control or emergency shutdown.
- The MCB would typically not include the back panel of the main board (if such exist).
- The MCB would also not include those electrical panels devoted primarily to housing control relays, printed cards (such as signal conditioning cards), or all other devices that the operators do not directly use to maintain plant control or safe shutdown.

Bin 5 – Cable Fires Caused by Welding and Cutting (Control/Auxiliary/Reactor Building): Cables are present at all parts of a nuclear power plant. For this bin, it is assumed that all exposed cables (i.e., cables that are not in conduits or wrapped by noncombustible materials) have an equal likelihood of experiencing a fire caused by welding and cutting across the entire location. To establish the ignition source weighting factor for cables, the approach used in the Combustible Loading Calculation of the plant can be used. The cable quantity reported in the Combustible Loading Calculation for each compartment can be used to establish the ignition source weighting factor. Since fire caused by welding and cutting is the focus of this bin, the final ignition source weighting factor is based on a combination of cable loading and transient fire rating of the compartment. See Section 3.4.7.2, below for a discussion of transient weighting factors. The cable loading was based on the combustible load of the cables (Ref. 11) in each fire zone as shown in Attachment C-1.

Bin 6 – Transient Fires Caused by Welding and Cutting (Control/Auxiliary/Reactor Building): See Step 7 for the approach to establish the ignition source weighting factor for transients.

Bin 7 – Transients (Control/Auxiliary/Reactor Building): See Step 7 for the approach to establish the ignition source weighting factor for transients.

Bin 8 – Diesel Generators (Diesel Generator Room): Diesel generators are generally well-defined items that include a set of auxiliary subsystems associated with each engine. It is recommended that each diesel generator and its subsystems be counted as one unit. The subsystems may include diesel generator air start compressors, air receiver, batteries and fuel storage, and delivery system. It is recommended that the electrical cabinets for engine and generator control that stand separate from the diesel generator be included as part of "Plant-Wide Components - Electrical Cabinets". Control panels that are attached to engine may be counted as part of the engine.

Bin 9 – Air Compressors (Plant-Wide Components): This bin covers the large air compressors that provide plant instrument air. These compressors are generally well-defined devices. They may include an air receiver, air dryer, and control panel attached to the compressor. These items should be considered part of the air compressor. Noted that compressors associated with the ventilation systems are not part of this bin. Small air compressors used for specialized functions are also not part of this bin.

Bin 10 – Battery Chargers (Plant-Wide Components): These are generally well defined items associated with DC buses. Each charger should be counted separately.

Bin 11 – Cable Fires caused by Welding and Cutting (Plant-Wide Components): See the discussions for Bin 5. Note that for this bin, compartments that have been accounted for Bins 5 and 31 should be excluded.

Bin 12 – Cable Run (Plant-Wide Components): The cable loading of each compartment should be established using the same approach as that for Bin 5, except that, in this case, all plant compartments should be taken into account.

Bin 13 – Dryers (Plant-Wide Components): Clothes dryers are generally well-defined units.

Bin 14 – Electric Motors (Plant-Wide Components): The electrical motors associated with various devices, not including those counted in other bins, are included in this bin. This may include elevator motors, valve motors, etc. (The bin "electric motors" was referred to as "elevator motors" in previous EPRI reports related to fire-ignition frequencies. In this version of the fire ignition frequency model, the bin not only includes elevator motors, but other types of

electric motors as well.) Only sources greater than 5 horsepower are counted in this bin. Do not count MOV motors in this bin. FAQ 07-0031 (Ref. 8)

Bin 15 – Electrical Cabinets (Plant-Wide Components): Electrical cabinets represent such items as switchgears, motor control centers, DC distribution panels, relay cabinets, control and switch panels (excluding panels that are part of machinery), fire protection panels, etc. Electrical cabinets in a nuclear power plant vary significantly in size, configuration, and voltage. Size variation range from small-wall mounted units to large walk-through vertical control cabinets, which can be 20' to 30' long. The configuration can vary based on number of components that contribute to ignition, such as relays and circuit cards, and combustible loading, which also affects the fire frequency. Voltages in electrical cabinets vary from low voltage (120V) panels to 4.6kV switchgears. Even though it is expected that these features affect the likelihood of fire ignition, from a simple analysis of the event data involving the electrical cabinets, it was determined that the variation by cabinet type did not warrant separate frequency evaluation. Therefore, one fire frequency was estimated for the electrical cabinets.

The following rules are used for counting electrical cabinets:

- Simple wall-mounted panels housing less than four switches are excluded from the counting process,
- All free-standing electrical cabinets are counted by their vertical segments, and
- To expedite the process, an average number of vertical segments may be used for such cabinets as motor control centers and DC distribution panels.

In this context, the term "well-sealed" means there are no open or unsealed penetrations, there are no ventilation openings, and potential warping of the sides/walls of the panel would not open gaps that might allow an internal fire to escape. "Robustly secured" means that any doors and/or access panels are all fully and mechanically secured and will not create openings or gaps due to warping during an internal fire. For example, a panel constructed of sheet metal sides "tackwelded" to a metal frame would not be considered well-sealed because internal heating would warp the side panels allowing fire to escape through the resulting gaps between weld points. A panel with a simple twist-handle latch mechanism would not be considered robustly secured because the twist handle would not prevent warping of the door under fire conditions. In contrast, a water-tight panel whose door/access panel is bolted in place or secured by mechanical bolt-on clamps around its perimeter would be considered both well-sealed and robustly secured. Also note that panels that house circuit voltages of 440V or greater are counted because an arcing fault could compromise panel integrity (an arcing fault could burn through the panel sides, but this should not be confused with the high energy arcing fault type fires).

Vertical segment counts are defined in FAQ 06-0016 (Ref. 5).

Bin 16a/b – High-Energy Arcing Faults (Plant-Wide Components): High-energy arcing faults are associated with switchgear and load centers. Switchyard transformers and isolation phase buses are not part of this bin. For this bin, similar to electrical cabinets, the vertical segments of the switchgear and load centers should be counted. Additionally, to cover potential explosive failure of oil filled transformers (those transformers that are associated with 4.16 or 6.9kV switchgear and lower voltage load centers) may be included in vertical segment counts of the switchgear.

Split fire ignition frequency Bin 16, HEAF, into two bins; namely, "16a - HEAF for low voltage panels (480-1000V)" and "16b - HEAF for medium-voltage panels (greater than 1000V)." Vertical segment counts are defined in FAQ 06-0017 (Ref. 6)

Bin 17 – Hydrogen Tanks (Plant-Wide Components): Hydrogen storage tanks are generally well-defined items. Multitank hydrogen trailers, because they are interconnected, should be counted as one unit.

Bin 18 – Junction Box (Plant-Wide Components): The frequency was apportioned based on ratio of cable in the area to the total cable in the plant. Therefore, the ignition source-weighting factor of the cables may be used for this bin, as well.

Bin 19 – Miscellaneous Hydrogen Fires (Plant-Wide Components): This bin includes hydrogen fires in miscellaneous systems other than hydrogen cylinder storage, generator cooling, and battery rooms. It is not necessary to count the ignition sources related to this bin. If it becomes necessary to establish an ignition frequency associated with the components of this bin for a specific compartment or a pipe segment, the approach recommended below in Step 7 for large systems may be used.

Bin 20 – Off-Gas/H2 Recombiner; BWRs (Plant-Wide Components): Generally there are at least two recombiner systems per BWR. Each recombiner system should be counted as one unit. If there are risk significant cables and components located close to a recombiner, in Task 11, the ignition frequency of a fire involving the recombiner can be estimated by assuming equal probability of fire ignition across the length of the recombiner system.

Bin 21 – Pumps (Plant-Wide Components): For this methodology, it is assumed that above a certain size, fire ignition is the same for all pumps. Pumps below 5 hp are assumed to have little or no significant contribution to risk. Do not count small sampling pumps. The number of pumps in all plant locations defined as "Plant-Wide" should be estimated.

The number of pumps in all plant locations defined as "Plant-Wide" should be estimated.

Due to a lack of sufficient statistical data, a separate bin was not defined for large valves that include hydraulic fluid powered mechanisms. It is recommended such valves (e.g. Main Steam Isolation Valves, and Turbine Stop Valves) be counted and included in the pump bin. Count Large hydraulic actuators (> 5 hp) as pumps only if the motor is greater than 5 hp. FAQ 07-0031 (Ref. 8)

Bin 22 – RPS MG sets (Plant-Wide Components): In PWRs, the RPS MG sets are well defined devices. The electrical cabinets associated with the MG sets are not included as part of these items.

Bin 23a/b – Transformers (Plant-Wide Components): All dry-type indoor transformers that are not part of larger components are included in this count. Control power transformers and other small transformers, which are subcomponents in major electrical equipment, should be ignored. They are assumed to be an integral part of the larger component. Examples of transformers accounted for in this bin include 4160/480 transformers attached to AC load centers, low-voltage regulators, and essential service lighting transformers. The large yard transformers are not part of this count. In addition, the analyst should count wall-mounted transformers if they do satisfy other counting criteria. Only count transformers rated 45 kVa or greater. FAQ 07-0031 (Ref. 8)

Bin 24 – Transient Fires caused by Welding and Cutting (Plant-Wide Components): See Step 7 for the approach to establish ignition source weighting factors for transients.

Bin 25 – Transients (Plant-Wide Components): See Step 7 for the approach to establish the ignition source weighting factor for transients.

Bin 26 – Ventilation Subsystems (Plant-Wide Components): This category includes components such as air conditioning units, chillers, fan motors, air filters, dampers, etc. A fan motor and compressor housed in the same component are counted as one component. Do not count ventilation fans if the drive motor is 5 hp or less. FAQ 07-0031 (Ref. 8)

Bin 27– Yard Transformer–Catastrophic: The high-voltage power transformers typically installed in the yard belong to this bin. They include plant output power transformers, auxiliary-shutdown transformers, and startup transformers, etc. Isolation phase bus ducts are also included in this bin to simplify fire frequency analysis. A catastrophic failure of a large transformer is defined as an energetic failure of the transformer that includes a rupture of transformer tank, oil spill and burning oil splattered a distance from the transformer. In this case the analyst should use the frequency and:

1. determine availability of offsite power based on the function of the transformer(s),

   and

2. consider propagation to adjacent (not nearby) building or components. A propagation path may be considered at the location of open or sealed penetrations, e.g., where a bus-duct enters from the Yard into the Turbine Building. Structural damage need only be considered only where appropriate shields are not present to protected structures and components against blast or debris.

Bin 28 – Yard Transformer–Non-Catastrophic: Similar to Bin 27 this bin includes the high-voltage power transformers typically installed in the yard. However, isolation phase bus ducts are not included in this bin. In a non-catastrophic transformer failure oil does spill outside transformer tank and the fire does not necessarily propagate beyond the fire source transformer. Analyst can use all the frequency and assume total loss of the "Transformer/Switch Yard" or may split this frequency equally among the large transformers of the area and assume loss of each transformer separately. Loss of offsite power should be determined based on the function of the affected transformer(s).

Bin 29 – Transformer Yard, Others: Items associated with yard transformers but not the transformers themselves (e.g., oil power output cables) are part of this bin. In the screening phase of the project, the analyst may conservatively assign the same frequency to all the items in this group. If the scenario would not screen out, the frequency may then be divided among the various items in this group. A relative ranking scheme may be used for this purpose. The ranking may be based on the relative characteristics of the items and analysts' judgment.

Bin 30 – Boiler (Turbine Building): Boilers are generally well-defined items. All ancillary items associated with each boiler may be included as part of the boiler. Control panels that are installed separate from a boiler may be included in the "Electrical Cabinets (Plant-Wide Components)" bin.

Bin 31 – Cable Fires caused by Welding and Cutting (Turbine Building): See the discussion for Bin 5.

Bin 32 – Main Feedwater Pumps (Turbine Building): Main feedwater pumps are generally well-defined entities. If there are ancillary components associated with each pump, it is recommended to include those items as part of the pump.

Bin 33 – T/G Excitor (Turbine Building): The turbine generator excitor is a well-defined item. Generally, there is only one excitor per unit.

Bin 34 – T/G Hydrogen (Turbine Building): A complex of piping, valves, heat exchangers, oil separators, and often skid-mounted devices are associated with turbine generator hydrogen. Consider the entire complex as one system and assign the ignition frequency of this bin to that system. It is important to have a clear definition of system boundaries to ensure that, between this bin and Bin 19, all hydrogen-carrying items of the plant are properly accounted for. Similar to Bin 29, in the screening phase of the project, the analyst may conservatively assign the same frequency to all the items in this bin. If the scenario would not screen out, the frequency may then be divided among the various items using a relative ranking scheme. The ranking may be based on the relative characteristics of the items and the analysts' judgment.

Bin 35 – T/G Oil (Turbine Building): Similar to hydrogen, a complex of oil storage tanks, pumps, heat exchangers, valves, and control devices belong to this bin. It is recommended to treat the entire complex as one system and assign the ignition frequency of this bin to that system. Similar to the preceding bin and Bin 29, in the screening phase of the project, the analyst may conservatively assign the same frequency to all the items in this bin. If the scenario would not screen out, the frequency may then be divided among the various items using a relative ranking scheme. The ranking may be based on the relative characteristics of the items and analysts' judgment.

Bin 36 – Transient Fires caused by Welding and Cutting (Turbine Building): See Step 7 for the approach to establish the ignition source weighting factor for transients.

Bin 37 – Transients (Turbine Building): See Step 7 for the approach to establish the ignition source weighting factor for transients.

Bin N/A – This bin includes plant equipment screened out as ignition sources during plant walkdown. For example, pumps less than 5 horsepower, transformers less than 45 kVA, or well-sealed, non-ventilated electrical panels.

3.4.7 Step 7: Ignition Source Weighting Factors

Ignition source weighting factor, $W_{IS,J}$, is the fraction of ignition source (IS) that is present in compartment J. The $W_{IS,J}$ were evaluated for all the compartments and for all ignition sources identified in Step 1 of this task. The bins listed in the preceding section can be classified in three categories: countable items, transients, and large systems.

The counts were performed at the fire zone level and later combined to determine the ignition frequencies for the fire compartments. The counts were performed at the fire zone level because the location weighting factors and the fire influencing factors may be different for different zones that are part of the same fire compartment. Counting at the fire zone level allows the correct weighting factors and fire influencing factors to be used.

A separate procedure is presented below for each type.

3.4.7.1 Countable Items

The ignition source weighting factor, $W_{IS,J}$, for countable items is calculated by dividing the number of each IS type in compartment J by the total number in the generic locations obtained in Step 6. For example, if there are two pumps in the AFW pump room and there are 50 pumps counted for Bin 21 in Step 6, the ignition source weighting factor for the pumps in this room would be 2 / 50 = 0.04. Note that $W_{IS,J}$ for ignition sources grouped in the "Plant-Wide Components" bin needs the total equipment count for the plant.

3.4.7.2 Transients

A ranking scheme is developed in NUREG/CR-6850 to assign weighting factors for ignition frequency bins involving transient combustibles or activities. The NUREG/CR-6850 scheme is used in this calculation. This scheme applies to all transient fire related bins defined in Table 3-1; that is Bins 3, 5, 6, 7, 11, 24, 25, 31, 36 and 37. A separate relative ranking analysis should be conducted for each bin. Occupancy level, storage of flammable materials, and type and frequency of maintenance activities in a zone are the three most important influencing factors of the likelihood of fire ignition involving a transient combustible or activity.

It is assumed that transient fires may occur at all areas of a plant unless precluded by design and/or operation, such as inside the BWR drywell during power operation. The only areas that can be assigned a zero transient fire frequency are those that are physically uninhabitable during plant operation. Administrative controls significantly impact the characteristics and likelihood of transient fires, but they do not preclude their occurrence, since there is industry evidence of failure to follow administrative control procedures.

Some areas of the plant, such as office areas (computers, cubicles, etc) and chemistry labs may contain safe shutdown cables. The fire frequency for these areas may be underestimated if the analysis consists mainly of counting plant components like electrical cabinets, pumps, etc., because these rooms do not contain plant-type sources. High-transient fire "influence factors" may be assigned to these areas in order to properly capture the fire risk.

Table 3-1 does not include transient fires for all locations. Therefore, the mapping of the plant specific locations to the generic locations will be different for fixed ignition sources vs. transient sources, e.g., battery rooms and diesel generator rooms.

The NUREG/CR-6850 scheme involves assigning one of five severity levels to three fire influencing factors for each zone. The three fire influencing factors as described in NUREG/CR-680 are:

1. Maintenance – The frequency and the nature of maintenance activities (preventive and/or corrective) in a compartment can impact the likelihood and characteristics of transient fires. This depends on the type of equipment in the compartment, maintenance and hot work procedures, and housekeeping practices. The number of work orders issued during power operation for different compartments of the plant during a specific time period can be used to establish the relative ranking associated with maintenance activities. The analyst should use engineering judgment to determine the maintenance factor of compartments with no work orders in the selected period of time. The judgment can be based on the characteristics of the compartment relative to compartments with work orders. If the work orders cannot be collected easily, the analyst may use engineering judgment based on personal experience or information gathered from the maintenance personnel of the plant. In this case, the analyst may ask the maintenance personnel to rate assign a rating number between 0 and 10 in terms of frequency of maintenance at a compartment and offer the two

or three most typical maintenance activities (e.g., welding, pump overhaul, and electrical device replacement). A “0” rating can only be assigned to those compartments where no maintenance is possible or allowed during power operation.

2. Occupancy – Occupancy level, which includes traffic, of a compartment impacts both the likelihood of transient combustibles (within the limits specified by plant housekeeping program) present in the compartment and the likelihood of ignition. Engineering judgment may be used to determine the occupancy factor.

3. Storage – Temporary or permanent storage of combustible/flammable materials in racks, cabinets, and other forms can impact the frequency and characteristics of transient fires initiated in compartments where such storage racks/cabinets are placed. The amount, type, and frequency of the use of material maintained in these storage containers should be taken into account. Engineering judgment augmented with plant walkdowns may be used to determine the storage factor.

The following five severity levels are:

1. No (0) - Can be used only for those compartments where transients are precluded by design.

2. Low (1) - Reflects minimal level of the factor.

3. Medium (3) - Reflects average level of the factor.

4. High (10) - Reflects the higher-than-average level of the factor.

5. Very high (50) - Reflects the significantly higher-than-average level of the factor (only for “maintenance” influencing factor).

Table 3-5 provides a brief description of these levels for each influencing factor. The following additional comments from NUREG/CR-6850 are noted.

- The influencing factor for maintenance should be based on the frequency and type of activities. The information obtained from work order counts or maintenance staff should be translated to the five levels defined here.
- If maintenance activity of a compartment includes liquid combustible/flammable material (e.g., diesel fuel, lubricating oil), the compartment should be rated as “high”. This exercise should consider all compartments affected by the maintenance activity. For example, if lube oil is staged in the turbine building for diesel generator oil change, both the turbine building and diesel generator room are considered affected by this maintenance activity.
- A low rating should be assigned to those compartments where administrative procedures prohibit welding and cutting during power operation.
- Areas requiring dosimetry may be assigned a low occupancy level, unless personnel needs walk through these areas to access other areas of the plant.

Table 3-4 Description of Transient Fire Influencing Factors

Influencing Factor	No (0)	Low (1)	Medium (3)	High (10)	Very high (50)
Maintenance	Maintenance activities during power operation are precluded by design.	Small number of PM/CM work orders compared to the average number of work orders for a typical compartment.	Average number of PM/CM work orders.	Large number of (PM)/(CM) work orders compared to the average number of work orders for a typical compartment.	Should be assigned to plant areas that may experience significantly more (PM)/(CM) work orders compared to the average number of work orders for a typical compartment.
Occupancy	Entrance to the compartment is not possible during plant operation.	Compartment with low foot traffic or out of general traffic path.	Compartments not continuously occupied, but with regular foot traffic.	Continuously occupied compartment.	Not applicable
Storage	Entrance to the compartment is not possible during plant operation.	Compartment where no combustible/ flammable materials are stored.	Compartments where all combustible/ flammable material is stored in closed containers placed in dedicated firesafe cabinets.	Compartments where combustible/ flammable materials may sometimes be brought in and left in either open containers for a short time or in a closed container, but outside a dedicated firesafe cabinet for an extended time.	Not applicable

Since the different transient fire bins address different plant locations and activities, the influencing factors were evaluated separately for each case. The following notes are provided for the various bins.

- For general transient fires (i.e., Bins 3, 7, 25 and 37), all three influencing factors were evaluated.
- For transient fires caused by welding and cutting (i.e., Bins 6, 24, and 36), only the maintenance influencing factor was evaluated. A “low” rating was assigned to compartments for which administrative procedures prohibit welding and cutting during power operation.
- For cable fires caused by welding and cutting (i.e., Bins 5, 11, and 31), as in the other cases of welding and cutting, only the maintenance influencing factor was evaluated.

The numerical rating of the factors are added for each compartment and then normalized across all the compartments of the location. That is, the ignition source weighting factor for transients is calculated using the sum of the influencing factors.

For general transients (i.e., Bins 3, 7, 25, and 37), the following equation was used to establish the ignition source weighting factor:

$$W_{GT,J,L} = \frac{(n_{m,J,L} + n_{o,J,L} + n_{s,J,L})}{N_{GT,L}}$$

$$N_{GT,L} = \sum (n_{m,i,L} + n_{o,i,L} + n_{s,i,L})$$

(summed over all i, location L compartments).

where:

$n_{m,J,L}$ ≡ Maintenance influence factor rating of compartment J of location L,
$n_{o,J,L}$ ≡ Occupancy influence factor rating of compartment J of location L, and
$n_{s,i,L}$ ≡ Storage influence factor rating of compartment J of location L.

In the case of transient fires caused by welding and cutting (i.e., Bins 6, 24, and 36), the following equation was used:

$$W_{WC,J,L} = \frac{n_{m,J}}{N_{WC}}$$

$$N_{WC} = \sum n_{m,i,L}$$

(summed over i, all the compartments of location L).

For cable fires caused by welding and cutting (i.e., Bins 5, 11, and 31), the following equation was used:

$$W_{CF,J} = \frac{n_{m,J}}{N_{CF}} W_{Cable,J}$$

$$N_{CF} = \sum n_{m,i,L}$$

(summed over all i, location L compartments),

where:

$W_{Cable,J}$ ≡ Cable load of compartment J, based on the ratio of quantity of cables in compartment J over the total quantity of cables in the location.

3.4.7.3 Large Systems

Bins 19, 20, and 35 address a complex of components within the plant that have common characteristics. The detailed fire analysis in a later task may need fire frequency estimation based on a small portion of the complex of components from the bin. The simplest approach would assume that there is equal likelihood across the complex of components. A geometric factor may be used to adjust bin frequency to the specific area of the plant where the components addressed in the bin could be risk-significant. The geometric factor refers to floor area ratio, or the ratio of the floor area where the fire will have the same impact. In place of a geometric factor, the analyst may count the various components of the complex and rate them by an ad-hoc scheme that discriminates by the relative likelihood of ignition. For example, for Bin 19, it may become necessary to estimate the ignition frequency associated with miscellaneous hydrogen piping in a specific compartment of the Reactor Building. In this case the analyst may estimate the fraction of the piping and components of this bin that are present in this specific compartment and use that fraction to adjust bin frequency to estimate the fire ignition frequency associated with hydrogen piping. If the hydrogen piping in this compartment is composed of only one pipe piece with no flanges, valves, or any other items attached to it, the analyst may use an adjusting factor smaller than the simple fraction suggested above. However, if the compartment houses a disproportionate fraction of pressure regulators, valves, and flanges, the analyst may elect to use an adjusting factor greater than the simple fraction.

No specific analysis was performed at this time. As the needs of the detailed fire analysis become evident, additional analyses will be performed as needed.

3.4.8 Step 8: Ignition Source and Compartment Fire Frequency

The fire frequency (generic or plant-specific) for each ignition source, λ_{IS-J}, was calculated using the data quantified in the preceding steps. Note that when adding various ignition source frequencies to obtain compartment fire frequency, the mean value of the uncertainty distributions is used for the various parameters of the summation. This will yield the mean value of compartment fire frequency. The uncertainty distribution of compartment fire frequency is not necessary in the screening steps for a fire PRA. Propagation of the uncertainty distributions for the ignition sources will be done in Task 7.18 (Uncertainty and Sensitivity), if a particular fire source dominates results.

3.5 Uncertainty

As stated in NUREG/CR-6850, the generic fire frequencies have been identified as the main source of uncertainty in this task. The generic frequencies are based on fire events data collected by EPRI from different data sources. The sources include individual nuclear power plants, and other organizations and government agencies like Nuclear Electric Insurance Limited (NEIL) and the Nuclear Regulatory Commission (NRC). Each of these sources has different criteria for reporting fires. Furthermore, some fire reports were not written specifically for describing a fire, but a fire was part of the event.

In addition to the variability generated by different data sources, it is unlikely that EPRI has been successful in collecting a report for every fire that has occurred in U.S. nuclear power plants. The fire frequencies, however, do not reflect this limitation.

In summary, the generic frequencies are estimated and uncertainty bounds are provided (NUREG/CR-6850, Appendix C (Ref. 1)). These uncertainty bounds account for the inherent randomness of the occurrence of fire events, and the variability among the plants.

4.0 CONCLUSIONS

The ignition sources were divided into two broad categories for this calculation; fixed ignition sources and transient sources. The following table provides a cross reference as to which category the bins from NUREG/CR-6850 fall into.

Table 4-1 BIN # vs Fixed/Transient Ignition Source Category

Bin No.	Location	Ignition Source	Fixed Ignition Sources	Transient Sources
1	Battery Room	Batteries	X	
2	Containment PWR	Reactor Coolant Pump	N/A	
3	Containment PWR	Transients and hotwork		N/A
4	Control Room	Main Control Board	X	
5	Control/Aux/Reactor Building	Cable fires caused by welding and cutting		X
6	Control/Aux/Reactor Building	Transient fires caused by welding and cutting		X
7	Control/Aux/Reactor Building	Transients		X
8	Diesel Generator Room	Diesel Generators	X	
9	Plant-Wide Components	Air Compressors	X	
10	Plant-Wide Components	Battery Chargers	X	
11	Plant-Wide Components	Cable fires caused by welding and cutting		X
12	Plant-Wide Components	Cable Run (Self-ignited cable fires)	X	
13	Plant-Wide Components	Dryers	X	
14	Plant-Wide Components	Electric motors	X	
15	Plant-Wide Components	Electrical Cabinets	X	
16a	Plant-Wide Components	High energy arcing faults (Low-Voltage Panels 480-1000V)	X	
16b	Plant-Wide Components	High energy arcing faults (Medium-Voltage Panels greater than 1000V)	X	
17	Plant-Wide Components	Hydrogen Tanks	X	
18	Plant-Wide Components	Junction box	X	
19	Plant-Wide Components	Misc. Hydrogen Fires	X	
20	Plant-Wide Components	Off-gas/H2 Recombiner (BWR)	X	
21	Plant-Wide Components	Pumps	X	
22	Plant-Wide Components	RPS MG sets	X	
23a	Plant-Wide Components	Transformers (Oil filled)	X	
23b	Plant-Wide Components	Transformers (Dry)	X	
24	Plant-Wide Components	Transient fires caused by welding and cutting		X

Bin No.	Location	Ignition Source	Fixed Ignition Sources	Transient Sources
25	Plant-Wide Components	Transients		X
26	Plant-Wide Components	Ventilation Subsystems	X	
27	Transformer Yard	Transformer - Catastrophic	X	
28	Transformer Yard	Transformer - Non Catastrophic	X	
29	Transformer Yard	Yard transformers (Others)	X	
30	Turbine Building	Boiler	X	
31	Turbine Building	Cable fires caused by welding and cutting		X
32	Turbine Building	Main feedwater pumps	X	
33	Turbine Building	Turbine Generator (T/G) Excitor	X	
34	Turbine Building	T/G Hydrogen	X	
35	Turbine Building	T/G Oil	X	
36	Turbine Building	Transient fires caused by welding and cutting		X
37	Turbine Building	Transients		X

The fixed ignition results are provided in Attachment A. Table A-1 “Fire Compartment Ignition Frequencies” gives the total fire ignition frequencies (which includes both fixed and transient) for each fire compartment and Table A-2 “Fire Zone Ignition Frequencies” provides the total ignition frequency at the fire zone level. Attachment B provides the detailed fixed ignition source worksheets and Attachment C provides the details of the transient sources analysis.

5.0 REFERENCES

1. NUREG/CR-6850, EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities, September 2005.

2. Kaplan, “On a ‘Two-Stage’ Bayesian Procedure for Determining Failure Rates from Experiential Data”, IEEE Transactions on Power Apparatus and Systems, Volume PAS-102, 1983, pp. 195-202.

3. ANS Standard BSR/ANS 58.23, FPRA Methodology Standard, April 2006.

4. EPRI Technical Report, “Fire Event Data Base and Generic Ignition Frequency Model for US Nuclear Power Plants”, 2002.

5. FAQ 06-0016, Revision 1, “Clarification/enhancement of Ignition Source counting guidance for Electrical Cabinets in NUREG/CR-6850, supporting NFPA-805 Fire PRA application” [CLOSED 10/05/07 ML072700475]

6. FAQ 06-0017, Revision 2, “Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application” [CLOSED 9/26/07 ML072500300]

7. FAQ 06-0018, Revision 1, “Clarification/enhancement of Ignition Source counting guidance for Main Control Board (MCB) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application” [CLOSED 9/7/07 ML072500273]

8. FAQ 07-0031, Revision 0, "Clarification/enhancement of Ignition Source counting guidance for miscellaneous items in NUREG/CR-6850, supporting NFPA-805 Fire PRA application." [CLOSED 12/17/07 ML0728406581]

9. RES & EPRI Team Response to FAQ 07-0031 NUREG/CR-6850, EPRI TR-1011989, "Clarification of Miscellaneous Ignition Source Binning Issues", Final Revision 0 - 10/11/2007

10. FAQ 07-0035, Revision 0, "Clarification/enhancement for Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application."

11. SAP Equipment Information

12. CNS Combustible Loading Calculation, Rev. 4.1

13. 10CFR50 Appendix R Post-Fire Safe and Alternative Shutdown Analysis Report

14. CNS Fire Hazards Analysis

15. Fire Hazards Analysis Figure 1, Fire Area Drawing Elevations 859'-9", 877'-6", 881'-9" & 882'-6".

16. Fire Hazards Analysis Figure 2, Fire Area Drawing Elevation 903'-6".

17. Fire Hazards Analysis Figure 3, Fire Area Drawing Elevation 918'-0".

18. Fire Hazards Analysis Figure 4, Fire Area Drawing Elevation 932'-6".

19. Fire Hazards Analysis Figure 5, Fire Area Drawing Elevations 958'-3", 976'-0" & 1001'-0".

20. Fire Hazards Analysis Figure 6, Fire Area Drawing Miscellaneous Buildings Elevation 903'-6".

21. Drawing 2050, General Arrangement Turbine Building Basement Floor Plan, Rev. N12.

22. Drawing 2051, Turbine Building General Arrangement Mezzanine Floor Plan, Rev. N23.

23. Drawing 2052, General Arrangement Turbine Building Operating Floor Plan, Rev. N30.

24. Drawing 2056, General Arrangement Intake Structure Plan & Sections, Rev. N12.

25. Drawing 2059, General Arrangement Reactor Building Plan Below Grade, Rev. N05.

26. Drawing 2060, General Arrangement Reactor Building Plan at Elev. 903'-6", Rev. N11.

27. Drawing 2061, General Arrangement Reactor Building Plan at Elev. 931'-6", Rev. N09.

28. Drawing 2062, General Arrangement Reactor Building Plan at Elev. 958'-3", Rev. N06.

29. Drawing 2063, General Arrangement Reactor Building Plan at Elev. 976'-0", Rev. N06.

30. Drawing 2064, General Arrangement Reactor Building Plan at Elev. 1001'-0", Rev. N08.

31. Drawing 2067, General Arrangement Radwaste Building Plans at Elev. 877'-6" & 903'-6", Rev. N10.

32. Drawing 2068, General Arrangement Radwaste Building Plans at Elev. 918'-0" & 934'-0", Rev. N10.

33. Drawing 2072, General Arrangement Augmented Radwaste Building Plans, Rev. N03.

Attachment A

Fixed Ignition Source Analysis

Table A-1 - Fire Compartment Ignition Frequencies

Fire Compartment	Fire Compartment Description	Total Fire Compartment Ignition Frequency
ARW	Augmented Radwaste Building	5.230E-02
CB-A	CB Basement, CB 903, Corridor RPS Room 1A	4.836E-03
CB-A-1	CB 903 DC SWG Rm 1A, Battery Rm 1A	1.365E-03
CB-B	CB 903 DC SWG Rm 1B, Battery Rm 1B	1.279E-03
CB-C	CB 903 RPS Rm 1B	1.475E-03
CB-D	Control Room, CSR, Cable Expansion Rm, Aux Relay Rm	1.494E-02
CM	Cable Manholes P1, C1, C2, P2	8.400E-05
DG-A	DG Room 1A	9.186E-03
DG-B	DG Room 1B	9.186E-03
DW	Drywell	9.992E-04
IS-A	Intake Structure	6.445E-03
MPF	Mulit-Purpose Facility	4.510E-03
NCS	Non-Critical Switchgear Room	4.243E-03
OB	Office Building	6.783E-03
OG	Off-Gas Building	9.984E-04
OWC	Optimum Water Chemistry Building	3.919E-03
RB	Reactor Building (excluding Drywell and Torus)	3.000E-02
RB-E	Suppression Pool Area	4.581E-04
RB-J	RB 931 Critical SWG Room 1F	1.684E-03
RB-K	RB 931 Critical SWG Room 1G	1.728E-03
RW	Radwaste Building	1.128E-02
TB-A	TB including Non-Critical SWG Room and Office Building	7.849E-02
TB-C	Steam Tunnel	6.346E-04
YD	Yard	3.607E-02

Table A-2 - Fire Zone Ignition Frequencies

Fire Zone	Fire Compartment	Fire Zone Description	Bldg	Elevation	Fire Zone Fixed Source Ignition Frequency	Fire Zone Cable Self-Ignition Frequency (Bin 12)	Fire Zone Junction Box Ignition Frequency (Bin 18)	Total Fire Zone Transient Frequency	Total Fire Zone Ignition Frequency
1A	RB	RCIC and Core Spray Pump Room	Reactor Bldg.	859'-9", 881'-9"	4.950E-04	0.000E+00	0.000E+00	4.898E-04	9.848E-04
1B	RB	Core Spray Pump Room	Reactor Bldg.	859'-9"	4.821E-04	0.000E+00	0.000E+00	4.898E-04	9.719E-04
1C	RB	RHR Pump Room 1A and 1C	Reactor Bldg.	859'-9"	5.995E-04	0.000E+00	0.000E+00	4.898E-04	1.089E-03
1D	RB	RHR Pump Room 1B and 1D	Reactor Bldg.	859'-9", 881'-9"	4.516E-04	0.000E+00	0.000E+00	4.898E-04	9.414E-04
1E	RB	HPCI Pump Room	Reactor Bldg.	859'-9", 881'-9"	1.151E-03	0.000E+00	0.000E+00	4.898E-04	1.641E-03
1F	RB-E	Suppression Pool Area	Reactor Bldg.	859'-9", 881'-9"	3.970E-04	0.000E+00	0.000E+00	6.109E-05	4.581E-04
1G	RB	Hydraulic Drive Pump Area	Reactor Bldg.	881'-9"	2.780E-04	0.000E+00	0.000E+00	4.898E-04	7.678E-04
2A-1	RB	903'-6" Northeast Corner	Reactor Bldg.	903'-6"	1.215E-03	8.519E-05	3.948E-05	9.187E-05	1.432E-03
2A-2	RB	CRD Units - North	Reactor Bldg.	903'-6"	1.475E-03	1.704E-04	7.896E-05	7.422E-04	2.467E-03
2A-3	RB	903'-6" South Corridor	Reactor Bldg.	903'-6"	5.207E-04	8.519E-05	3.948E-05	6.073E-04	1.253E-03
2B	RB	RHR HX-1A	Reactor Bldg.	903'-6"	0.000E+00	0.000E+00	0.000E+00	4.552E-04	4.552E-04
2C	RB	CRD Units - South	Reactor Bldg.	903'-6"	1.892E-03	1.559E-04	7.226E-05	7.366E-04	2.857E-03
2D	RB	RHR HX-1B	Reactor Bldg.	903'-6"	0.000E+00	0.000E+00	0.000E+00	4.552E-04	4.552E-04
2E	TB-C	Steam Tunnel	Reactor Bldg.	903'-6"	5.735E-04	0.000E+00	0.000E+00	6.109E-05	6.346E-04
3A	RB-J	SWGR Room 1F	Reactor Bldg.	932'-6"	1.623E-03	0.000E+00	0.000E+00	6.109E-05	1.684E-03
3B	RB-K	SWGR Room 1G	Reactor Bldg.	932'-6"	1.667E-03	0.000E+00	0.000E+00	6.109E-05	1.728E-03
3C	RB	REC HX and Pump Area	Reactor Bldg.	931'-6"	9.032E-04	7.082E-05	3.282E-05	6.019E-04	1.609E-03
3D	RB	Reactor MG Set Lube Oil Cooler Area	Reactor Bldg.	931'-6"	2.170E-04	2.732E-05	1.266E-05	5.330E-04	7.900E-04
3E-1	RB	Regenerative HX Areas	Reactor Bldg.	931'-6"	6.555E-04	3.296E-05	1.528E-05	5.420E-04	1.246E-03
3E-2	RB	RWCU Recirc Pumps and Corridor	Reactor Bldg.	931'-6"	6.252E-04	1.648E-05	7.638E-06	5.159E-04	1.165E-03
4A	RB	RB Elevator and Accessway Area	Reactor Bldg.	958'-3"	9.981E-04	4.819E-05	2.233E-05	5.488E-04	1.617E-03
4B	RB	RB HVAC Area	Reactor Bldg.	958'-3"	1.042E-04	0.000E+00	0.000E+00	4.725E-04	5.767E-04
4C	RB	Fuel Pool HX, CRD Repair Room and Raw Water Cleanup Areas	Reactor Bldg.	958'-3"	1.238E-03	7.716E-05	3.576E-05	6.119E-04	1.962E-03
4D	RB	Reactor MG Set Oil Pump Area	Reactor Bldg.	958'-3"	7.039E-04	1.790E-05	8.297E-06	5.181E-04	1.248E-03
5A	RB	SBLC Pump Tank and Accessway	Reactor Bldg.	976'-0"	4.516E-04	2.633E-05	1.220E-05	5.315E-04	1.022E-03
5B	RB	Reactor MG Set Area	Reactor Bldg.	976'-0"	1.794E-03	1.481E-04	6.865E-05	7.243E-04	2.735E-03

Fire Zone	Fire Compartment	Fire Zone Description	Bldg	Elevation	Fire Zone Fixed Source Ignition Frequency	Fire Zone Cable Self-Ignition Frequency (Bin 12)	Fire Zone Junction Box Ignition Frequency (Bin 18)	Total Fire Zone Transient Frequency	Total Fire Zone Ignition Frequency
6	RB	Refueling Floor	Reactor Bldg.	1001'-0"	2.257E-04	0.000E+00	0.000E+00	4.898E-04	7.155E-04
7A	CB-A	RHR Service Water Booster Pump and Service Air Compressor Areas	Control Bldg.	882'-6"	1.890E-03	0.000E+00	0.000E+00	4.898E-04	2.379E-03
7B	CB-A	Emergency Condensate Storage TK. Area	Control Bldg.	877'-6"	8.679E-05	8.324E-08	3.857E-08	1.487E-04	2.356E-04
8A	CB-D	Aux Relay Room	Control Bldg.	903'-6"	1.265E-03	5.496E-05	2.547E-05	6.979E-05	1.415E-03
8B	CB-C	RPS Room 1B	Control Bldg.	903'-6"	1.327E-03	0.000E+00	0.000E+00	1.487E-04	1.475E-03
8C	CB-A	RPS Room 1A	Control Bldg.	903'-6"	1.413E-03	0.000E+00	0.000E+00	1.487E-04	1.562E-03
8D	CB-A	Seal Water Pump Area and Corridor	Control Bldg.	903'-6"	5.091E-04	4.105E-07	1.903E-07	1.489E-04	6.586E-04
8E	CB-A-1	Battery Room 1A	Control Bldg.	903'-6"	2.968E-04	8.324E-07	3.857E-07	1.491E-04	4.471E-04
8F	CB-B	Battery Room 1B	Control Bldg.	903'-6"	2.968E-04	8.324E-07	3.857E-07	1.491E-04	4.471E-04
8G	CB-B	DC SWGR Room 1B	Control Bldg.	903'-6"	6.827E-04	0.000E+00	0.000E+00	1.487E-04	8.314E-04
8H	CB-A-1	DC SWGR Room 1A	Control Bldg.	903'-6"	7.695E-04	0.000E+00	0.000E+00	1.487E-04	9.182E-04
9A	CB-D	Cable Spreading Room	Control Bldg.	918'-0"	2.402E-03	1.112E-03	5.155E-04	2.372E-04	4.267E-03
9B	CB-D	Cable Expansion Room	Control Bldg.	918'-0"	0.000E+00	6.634E-05	3.074E-05	7.159E-05	1.687E-04
10A	CB-D	Computer Room	Control Bldg.	932'-6"	2.057E-03	0.000E+00	0.000E+00	1.487E-04	2.206E-03
10B	CB-D	Control Room and SAS Corridor	Control Bldg.	932'-6"	6.716E-03	1.547E-05	7.171E-06	1.414E-04	6.880E-03
11A	TB-A	Turbine Lube Oil Storage TK. Room	Turbine Bldg.	882'-6"	2.492E-03	1.093E-05	5.065E-06	9.152E-04	3.424E-03
11B	TB-A	Turbine Bldg. Basement - South	Turbine Bldg.	882'-6"	4.005E-03	0.000E+00	0.000E+00	9.039E-04	4.909E-03
11C	TB-A	H2 Seal Oil Unit Area	Turbine Bldg.	882'-6"	3.520E-04	2.867E-04	1.329E-04	1.200E-03	1.972E-03
11D	TB-A	Condenser Pit Area	Turbine Bldg.	882'-6"	1.302E-04	4.162E-05	1.929E-05	8.938E-04	1.085E-03
11E	TB-A	Reactor Feed Pumps Area	Turbine Bldg.	882'-6"	1.370E-02	0.000E+00	0.000E+00	9.039E-04	1.461E-02
11F	TB-A	TB Controlled Corridor 882 Elev.	Turbine Bldg.	882'-6"	2.604E-04	1.463E-04	6.778E-05	1.055E-03	1.529E-03
11G	TB-A	Steam Jet Air Ejector Room	Turbine Bldg.	882'-6"	5.884E-04	9.557E-05	4.429E-05	9.495E-04	1.678E-03
11H	TB-A	Mechanical Vacuum Pumps Room	Turbine Bldg.	882'-6"	2.346E-04	1.611E-04	7.467E-05	1.070E-03	1.541E-03
11J	TB-A	Condensate, Condensate Booster and TEC Pumps Area	Turbine Bldg.	882'-6"	1.880E-03	4.253E-05	1.971E-05	9.478E-04	2.890E-03
11K	TB-A	Turbine Oil Conditioner Room	Turbine Bldg.	882'-6"	2.492E-03	0.000E+00	0.000E+00	9.039E-04	3.396E-03
11L	TB-A	Pipe Chase	Turbine Bldg.	892'-6"	0.000E+00	1.414E-04	6.552E-05	1.421E-04	3.490E-04
12A	TB-A	ISO Phase Bus Duct Area	Turbine Bldg.	903'-6"	1.768E-03	0.000E+00	0.000E+00	8.509E-04	2.619E-03
12B	TB-A	TB Controlled Corridor 903 Elev	Turbine Bldg.	903'-6"	1.389E-03	0.000E+00	0.000E+00	9.039E-04	2.293E-03

Fire Zone	Fire Compartment	Fire Zone Description	Bldg	Elevation	Fire Zone Fixed Source Ignition Frequency	Fire Zone Cable Self-Ignition Frequency (Bin 12)	Fire Zone Junction Box Ignition Frequency (Bin 18)	Total Fire Zone Transient Frequency	Total Fire Zone Ignition Frequency
12C	TB-A	Condenser and Heater Bay Areas	Turbine Bldg.	903'-6", 909'-6"	2.170E-04	9.097E-05	4.216E-05	9.448E-04	1.295E-03
12D	TB-A	Turbine Bldg. Floor-North	Turbine Bldg.	903'-6"	9.634E-04	1.027E-05	4.760E-06	9.145E-04	1.893E-03
12E	TB-A	Turbine Oil Reservoir Area	Turbine Bldg.	903'-6"	2.948E-03	4.026E-04	1.866E-04	1.267E-03	4.804E-03
12F	TB-A	Turbine Bldg. Document Storage Vault	Turbine Bldg.	918'-0"	0.000E+00	2.468E-04	1.144E-04	1.344E-03	1.706E-03
13A	TB-A	Turbine Operating Floor	Turbine Bldg.	932'-6"	1.172E-02	0.000E+00	0.000E+00	1.090E-03	1.280E-02
13B	NCS	Non-Critical SWGR Room	Turbine Bldg.	932'-6"	3.753E-03	0.000E+00	0.000E+00	4.898E-04	4.243E-03
13C	TB-A	Electrical Shop	Turbine Bldg.	932'-6"	5.211E-05	8.916E-05	4.132E-05	1.405E-03	1.588E-03
13D	TB-A	Instrument Shop, Instrument Records and Chart Rooms	Turbine Bldg.	932'-6"	4.339E-05	1.642E-07	7.610E-08	1.682E-04	2.119E-04
14A	DG-A	Emergency Diesel Generator 1A Room	Diesel Gen. Rm.	903'-6"	8.430E-03	0.000E+00	0.000E+00	5.457E-04	8.976E-03
14B	DG-B	Emergency Diesel Generator 1B Room	Diesel Gen. Rm.	903'-6"	8.430E-03	0.000E+00	0.000E+00	5.457E-04	8.976E-03
14C	DG-A	DG 1A Diesel Oil Day TK. Room	Diesel Gen. Rm.	903'-6"	0.000E+00	0.000E+00	0.000E+00	2.100E-04	2.100E-04
14D	DG-B	DG 1B Diesel Oil Day TK. Room	Diesel Gen. Rm.	903'-6"	0.000E+00	0.000E+00	0.000E+00	2.100E-04	2.100E-04
15	TB-A	Heating Boiler Room	Boiler Rm.	903'-6"	2.299E-03	0.000E+00	0.000E+00	5.037E-04	2.802E-03
16	TB-A	Turbine Bldg. Exhaust Fan Room	Fan Rm.	903'-6"	4.254E-04	0.000E+00	0.000E+00	5.037E-04	9.291E-04
17	TB-A	Water Treatment Bldg.	Water Treatment Bldg.	903'-6"	1.300E-03	0.000E+00	0.000E+00	5.457E-04	1.846E-03
18A	TB-A	Machine Shop	Machine Shop	903'-6"	3.882E-03	0.000E+00	0.000E+00	6.928E-04	4.575E-03
18B	TB-A	Machine Shop Clean Tool Room	Machine Shop	903'-6"	0.000E+00	0.000E+00	0.000E+00	5.457E-04	5.457E-04
18C	TB-A	Machine Shop Oil Storage Room	Machine Shop	903'-6"	0.000E+00	0.000E+00	0.000E+00	3.991E-04	3.991E-04
18D	TB-A	Machine Shop Paint Storage Room	Machine Shop	903'-6"	0.000E+00	0.000E+00	0.000E+00	3.991E-04	3.991E-04
18E	TB-A	Machine Shop Lunch Room and Records Storage Room	Machine Shop	923'-6"	0.000E+00	0.000E+00	0.000E+00	3.991E-04	3.991E-04
19A	OB	Office Bldg Controlled Corridor 903 Elev.	Office Bldg.	903'-6"	0.000E+00	0.000E+00	0.000E+00	5.457E-04	5.457E-04
19B	OB	Office Bldg. Occupancies and Controlled Corridors	Office Bldg.	903'-6", 918'-0", 932'-6"	4.669E-03	0.000E+00	0.000E+00	4.623E-04	5.131E-03
19C	OB	Office Building Penthouse	Office Bldg.	946'-11"	9.381E-04	0.000E+00	0.000E+00	1.681E-04	1.106E-03
20A	IS-A	Service Water Pump Area	Intake Structure	903'-6"	1.181E-03	3.288E-06	1.524E-06	2.615E-04	1.447E-03

Fire Zone	Fire Compartment	Fire Zone Description	Bldg	Elevation	Fire Zone Fixed Source Ignition Frequency	Fire Zone Cable Self-Ignition Frequency (Bin 12)	Fire Zone Junction Box Ignition Frequency (Bin 18)	Total Fire Zone Transient Frequency	Total Fire Zone Ignition Frequency
20B	IS-A	Circ. Water Pump and Traveling Screen Area	Intake Structure	903'-6"	4.746E-03	0.000E+00	0.000E+00	2.520E-04	4.998E-03
21A	RW	Radwaste Bldg. Basement	Radwaste Bldg.	877'-6"	3.370E-03	0.000E+00	0.000E+00	5.457E-04	3.915E-03
21B	RW	Radwaste Bldg. first floor	Radwaste Bldg.	903'-6"	2.807E-03	0.000E+00	0.000E+00	5.457E-04	3.353E-03
21C	RW	Radwaste Bldg. second floor	Radwaste Bldg.	918'-0"	1.465E-03	4.162E-06	1.929E-06	5.858E-04	2.057E-03
21D	RW	Radwaste Bldg. third floor	Radwaste Bldg.	934'-0"	5.643E-04	7.650E-05	3.545E-05	1.283E-03	1.960E-03
22A	ARW	Augmented Radwaste Bldg. Basement	Aug. Radwaste Bldg.	877'-6"	4.773E-02	1.422E-05	6.588E-06	6.828E-04	4.843E-02
22B	ARW	Augmented Radwaste Bldg. first floor	Aug. Radwaste Bldg.	903'-6"	2.050E-03	2.239E-05	1.038E-05	7.616E-04	2.844E-03
22C	ARW	Augmented Radwaste Bldg. second floor	Aug. Radwaste Bldg.	918'-6"	4.765E-04	0.000E+00	0.000E+00	5.457E-04	1.022E-03
23A	YD	Electric Motor Driven Fire Pump Room	Fire Pump House	903'-6"	6.686E-04	0.000E+00	0.000E+00	5.457E-04	1.214E-03
23B	YD	Diesel Driven Fire Pump Room	Fire Pump House	903'-6"	7.170E-03	0.000E+00	0.000E+00	5.457E-04	7.716E-03
23C	YD	Diesel Oil TK. Room	Fire Pump House	903'-6"	0.000E+00	0.000E+00	0.000E+00	2.520E-04	2.520E-04
24	MPF	Multi-purpose Facility	Multi-Purpose Facility	903'-6"	3.817E-03	0.000E+00	0.000E+00	6.928E-04	4.510E-03
25	OG	Off-Gas Bldg.	Off Gas Bldg.	903'-6"	4.948E-04	0.000E+00	0.000E+00	5.037E-04	9.984E-04
26	OWC	Optimum Water Chemistry (OWC) Building	Opt. Water Chemisty Bldg.	903'-6"	3.667E-03	0.000E+00	0.000E+00	2.520E-04	3.919E-03
CM	CM	Cable Manholes P1, C1, C2, P2	Control Bldg.		0.000E+00	0.000E+00	0.000E+00	8.400E-05	8.400E-05
DW	DW	Drywell	Drywell	903'-6"	9.992E-04	0.000E+00	0.000E+00	0.000E+00	9.992E-04
YD	YD	Transformer Yard	Transformer Yard	903'-6"	2.668E-02	0.000E+00	0.000E+00	2.100E-04	2.689E-02

Attachment B

Detailed Fixed Ignition Source Worksheets

FIRE ZONE: 1A		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CS-P-A	CSP A	PMP	1250 hp - 28 gal oil	21	1	
EE-STR-1308MV	STR F/ PC-1308MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250RCIC CP	STR F/ RCIC BAROMETRIC CDSR COND P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250RCIC VP	STR F/ RCIC BAROMETRIC CDSR VAC P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-250RCIC	250VDC RCIC STRR	PNL	250 VDC	15	1	PRA Component - Non-ventilated
HV-FAN- FC-R-1F	NE QUAD RECIRC FAN	FAN	3 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 25-1	CS INSTR RACK CH A 25-1	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-58	RCIC INSTR RACK 25-58	PNL		15	1	Non-ventilated - Robustly Secured
RCIC-P-CP	RCIC COND P	PMP	3 hp	N/A	1	Less than 5 horsepower
RCIC-P-VP	RCIC VAC P	PMP	3 hp	N/A	1	Less than 5 horsepower
RCIC-TU-TURB	RCIC TU	TURB	80 hp	21	1	
RW-P-B1	RB FL DR SUMP P B1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-B2	RB FL DR SUMP P B2	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 1B		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CS-P-B	CSP B	PMP	1250 hp - 28 gal oil	21	1	
EE-STR-125HPCI MO16	STR F/ HPCI-MO16	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-125B	125VDC STRR	PNL	125 VDC	15	1	PRA Component - Non-ventilated
LRP-PNL- 25-60	CS INSTR RACK CH B 25-60	PNL		15	1	Non-ventilated - Robustly Secured
RW-P-D1	RB FL DR SUMP P D1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-D2	RB FL DR SUMP P D2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-E1	RB BASEMENT EQUIP DR SUMP P E1	PMP	5 hp	21	1	
RW-P-E2	RB BASEMENT EQUIP DR SUMP P E2	PMP	5 hp	21	1	

FIRE ZONE: 1C		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CM-P-RX	RB AUX COND P	PMP	30 hp	21	1	
EE-STR-921MV	STR F/ RHR-921MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
HV-FAN- FC-R-1J	NW QUAD RECIRC FAN	FAN	3 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 25-59	RHR INSTR RACK CH A 25-59	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-7	RECIRC P INSTR RACK 25-7	PNL		15	1	Non-ventilated - Robustly Secured
PC-P-TD	TORUS DR P	PMP	60 hp	21	1	
RHR-P-A	RHR P A	PMP	1250 hp - 28 gal oil	21	1	
RHR-P-C	RHR P C	PMP	1250 hp - 28 gal oil	21	1	
RW-P-A1	RB FL DR SUMP P A1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-A2	RB FL DR SUMP P A2	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 1D		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-STR-1302MV	STR F/ PC-1302MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-1303MV	STR F/ PC-1303MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
HV-FAN- FC-R-1H	SW QUAD RECIRC FAN	FAN	3 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 25-50	HPCI INSTR RACK 25-50	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-62	RHR INSTR RACK CH B 25-62	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR116	RB HPCI SV RACK 116	PNL		15	1	Non-ventilated - Robustly Secured
RHR-P-B	RHR-P-B	PMP	1250 hp - 28 gal oil	21	1	
RHR-P-D	RHR-P-D	PMP	1250 hp - 28 gal oil	21	1	
RW-P-C1	RB FL DR SUMP P C1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-C2	RB FL DR SUMP P C2	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 1E		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-STR-125HPCI MO17	STR F/ HPCI-MO17	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125HPCI MO58	STR F/ HPCI-MO58	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI ALOP	STR F/ HPCI AUX LO P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI CP	STR F/ HPCI GLAND SEAL COND P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI GSE	STR F/ HPCI GLAND SEAL EXH	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO14	STR F/ HPCI-MO14	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO19	STR F/ HPCI-MO19	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO20	STR F/ HPCI-MO20	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO21	STR F/ HPCI-MO21	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO24	STR F/ HPCI-MO24	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250HPCI MO25	STR F/ HPCI-MO25	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-125HPCI	125VDC HPCI STRR	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-250HPCI	250VDC HPCI STRR	PNL	250 VDC	15	1	PRA Component - Non-ventilated
HPCI-FAN-GSE	HPCI GLAND SEAL EXH	FAN	1 hp	N/A	1	Less than 5 horsepower
HPCI-P-ALOP	HPCI AUX LO P	PMP	7-1/2 hp	21	1	
HPCI-P-BP	HPCI BOOSTER P	PMP		21	1	
HPCI-P-CP	HPCI COND P	PMP	1 hp	21	1	PRA Component - Less than 5 horsepower
HPCI-P-MLOP	HPCI MN LO P	PMP		21	1	
HPCI-P-MP	HPCI MN P	PMP		21	1	
HV-FAN- FC-R-1G	FCU FC-R-1G	FAN	<5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 1F		FIRE COMPARTMENT: RB-E				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-SC	SUPP CHAMBER MONORAIL (BLDG-HST-SC)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-XFMR-LPR4G	XFMR F/ PNL LPR4G	XFMR	45 kVA	23b	1	
LRP-PNL-LPR4G	LP LPR4G	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 1G		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CRD-P-A	CRD P A	PMP	250 hp	21	1	
CRD-P-B	CRD P B	PMP	250 hp	21	1	
EE-STR-1305MV	STR F/ PC-1305MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
HV-FAN- FC-R-1E	SE QUAD RECIRC FAN	FAN	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 2A-1		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACD-P- CP-R-A1	AUX. COND DUP P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
ACD-P- CP-R-A2	AUX. COND DUP P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
BLDG-HST-H10	RB HST H10 DF AREA (BLDG-HST-H10)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-MCC-K	MCC-K	MCC		15	9	
EE-PNL-AA3	125VDC PNL AA3	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-BB3	125VDC PNL BB3	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-CA	125VDC PNL CA	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-CB	125VDC PNL CB	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-LPR1F	LP LPR1F	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SLDT1	ST LEAK DETECTION TEST PNL NU 1	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR- RHR-MO67	STR F/ RHR-MO67	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO131	STR F/ RCIC-MO131	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO132	STR F/ RCIC-MO132	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO14	STR F/ RCIC-MO14	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO16	STR F/ RCIC-MO16	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO18	STR F/ RCIC-MO18	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO20	STR F/ RCIC-MO20	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO21	STR F/ RCIC-MO21	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO27	STR F/ RCIC-MO27	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO30	STR F/ RCIC-MO30	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO33	STR F/ RCIC-MO33	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RCIC MO41	STR F/ RCIC-MO41	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-125RCIC	125VDC RCIC STRR	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-XFMR-LPR1F	XFMR F/ LP LPR1F	XFMR	30 kVA	N/A	1	Less than 45 kVA
HV-FAN- HF-R-1A	FUME HOOD FAN	FAN	<5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 2A-2		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACAD-CPSR-A	SPARE	CPSR		N/A	1	Electrically Disconnected
BLDG-HST-RX	RB HST RX (BLDG-HST-RX)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-RXA	RB AIR HST RXA (BLDG-HST-RXA)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-RXB	RB AIR HST RXB (BLDG-HST-RXB)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-MCC-Q	MCC-Q	MCC		15	10	
EE-MCC-R	MCC-R	MCC		15	9	
EE-PNL-LPREMF	LP LPREMF	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-CBX1		XFMR	<45 kVA	N/A	1	Less than 45 kVA
EE-XFMR-CBX2		XFMR	<45 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPREMF	XFMR F/ LP LPREMF	XFMR	15 kVA	N/A	1	Less than 45 kVA
HPI-CBX-1		PNL	Ventilated	15	1	
HPI-CBX-2		PNL	Ventilated	15	1	
HPI-CS-RB2	CAMERA CONN POINT RB2	PNL		15	1	Non-ventilated - Not Secured
HV-STR- HEPA-2	PB STA F/ TEMP HEPA UNIT 2 PWR	PNL	480 VAC	15	1	Non-ventilated
LRP-PNL- 25-15	FUEL POOL COOL PNL 25-15	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-22	CRD ACC MONITOR PNL 3 & 4 25-22	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-23	RECIRC P A INSTR RACK 25-23	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-27	SRM IRM PA RACK CH A 25-27	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-51	JET P INSTR RACK A 25-51	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-PASHT	PAS HT STR PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-PASSVP	PAS SV PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LIR-HV-R-AC	DW FAN COIL UNITS A & C LOC INSTR RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LIR-HV-R-BD	DW FAN COIL UNITS B&D LOC INSTR RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR104	RB LOC INSTR RACK 104	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR133A	MSRV BELLOWS LEAK TEST PNL LR-133A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR133B	MSRV BELLOWS LEAK TEST PNL LR-133B	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 2A-3		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-AC-MUX-O	AC FOR ANN MUX O	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-O	ANNUNCIATOR MULTIPLEXER CABINET O	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-MCC-RB	MCC-RB	MCC		15	5	
EE-PNL-CPP2	CRIT INST & CPP CPP2	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-STR-250DIV1 MO25A	STR F/ RHR-MO25A	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250DIV1 MO53A	STR F/ RR-MO53A	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250DIV2 MO25B	STR F/ RHR-MO25B	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250DIV2 MO53B	STR F/ RR-MO53B	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-XFMR-CBX3		XFMR	<45 KVA	N/A	1	Less than 45 kVA
HPI-CBX-3		PNL	Ventilated	15	1	

FIRE ZONE: 2B		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

2C	FIRE COMPARTMENT: RB					
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACAD-CPSR-D	SPARE	CPSR		N/A	1	Electrically Disconnected
ANN-AC-N	ANN MUX CABINET N AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-N	ANNUNCIATOR MULTIPLEXER CABINET N	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
CRD-PNL-SDV	TEST PNL F/ SDV VENT & DR V	PNL		15	1	Non-ventilated - Robustly Secured
EE-MCC-S	MCC-S	MCC		15	7	
EE-MCC-Y	MCC-Y	MCC		15	10	
EE-PNL- LP-ASDR	LP LP-ASDR	PNL	120/208 VAC - Ventilated	15	1	
EE-PNL-LPR1G	LP LPR1G	PNL	120/208 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-LPREMG	LP LPREMG	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR-1311MV	STR F/ PC-1311MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-XFMR-ASDR	30KVA XFMR 3PH 60HZ DRY TYPE	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPR1G	XFMR F/ LP LPR1G	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPREMG	XFMR F/ LP LPREMG	XFMR	30 kVA	N/A	1	Less than 45 kVA
HPI-CS-RB3	CAMERA CONN POINT RB3	PNL		15	1	Non-ventilated - Not Secured
HV-FCU- AC-ASDR-1	ASDR AC FAN COIL	FCU		26	1	
HV-HTR- AC-ASDR-1	ASDR ELEC HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-RAL-1A	RAIL CAR AIR LOCK UNIT HTR UH-RAL-1A MOT	MOT	1/6 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-RAL-1B	RAIL CAR AIR LOCK UNIT HTR UH-RAL-1B MOT	MOT	1/6 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-RAL-1C	RAIL CAR AIR LOCK UNIT HTR UH-RAL-1C MOT	MOT	1/6 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-RAL-1D	RAIL CAR AIR LOCK UNIT HTR UH-RAL-1A MOT	MOT	1/6 hp	N/A	1	Less than 5 horsepower
HV-STR- HEPA-1	PB STA F/ TEMP HEPA UNIT 1 PWR	PNL	480 VAC	15	1	Non-ventilated
LRP-PNL- 25-14	SRM IRM DR CONTR REL RACK 25-14	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 25-24	RECIRC P B INSTR RACK 25-24	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-4	CRD ACC MONITOR PNL 1&2 25-4	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 25-52	JET P INSTR RACK B 25-52	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-56	MS FLOW INSTR RACK 25-56	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-61	SRM IRM PA RACK CH B 25-61	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-ASDR ADS_REC	ALT SD RM ADS/REC CONTRL PNL	PNL		15	1	
LRP-PNL-ASDR HPCI	ALT SD RM HPCI CONTRL PNL	PNL		15	1	
LRP-PNL-ASDR RHR	ALT SD RM RHR CONTRL PNL	PNL		15	1	
LRP-RACK-LR119	NBI COLD REF LEG FLOW CONTR RACK	RACK		15	1	Non-ventilated - Robustly Secured
PAS-P-P1	PAS SAMPLE P P1	PMP	7 1/2 hp	21	1	
PAS-P-P2	PAS SAMPLE P P2	PMP	7 1/2 hp	21	1	
PNL 9-84	PMIS-MUX-LNK4	PNL	115 VAC - Ventilated	15	1	
RMP-P-RECEM	REC WTR RAD MONITOR SAMPLE P	PMP	<5 hp	N/A	1	Less than 5 horsepower

RMV-P-4A	DW VM SAMPLE P A	PMP	<5 hp	N/A	1	Less than 5 horsepower
RMV-RM-4	DW VM	PNL	115 VAC - Ventilated	15	1	
TSE-HST-CRD	NES CRN CRD EQUIP HANDL SYS,QLIST EVAL P	HOIST		N/A	1	Infrequent Use/Overcurrent Protection

FIRE ZONE: 2D		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: 2E		FIRE COMPARTMENT: TB-C				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- FC-R-1KA	ST TUNNEL FCU	FCU	7-1/2 hp	26	1	
HV-FCU- FC-R-1KB	ST TUNNEL FCU	FCU	7-1/2 hp	26	1	
LRP-RACK- LIR-HV-R-1K	RB HV UNIT 1-HV-R-1K LOC INSTR RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source
MS-AOV-A086A	MS ISO V A OUTBOARD	MSIV		21	1	
MS-AOV-A086B	MS ISO V B OUTBOARD	MSIV		21	1	
MS-AOV-A086C	MS ISO V C OUTBOARD	MSIV		21	1	
MS-AOV-A086D	MS ISO V D OUTBOARD	MSIV		21	1	
MS-HTR-121A	ST LEAK DETECTION TEST HTR 121A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-121B	ST LEAK DETECTION TEST HTR 121B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-121C	ST LEAK DETECTION TEST HTR 121C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-121D	ST LEAK DETECTION HEATER 121D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-122A	ST LEAK DETECTION TEST HTR 122A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-122B	ST LEAK DETECTION TEST HTR 122B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-122C	ST LEAK DETECTION TEST HTR 122C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-122D	ST LEAK DETECTION TEST HTR 122D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-123A	ST LEAK DETECTION TEST HTR 123A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-123B	ST LEAK DETECTION TEST HTR 123B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-123C	ST LEAK DETECTION TEST HTR 123C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-123D	ST LEAK DETECTION TEST HTR 123D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-124A	ST LEAK DETECTION TEST HTR 124A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-124B	ST LEAK DETECTION TEST HTR 124B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-124C	ST LEAK DETECTION TEST HTR 124C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-124D	ST LEAK DETECTION TEST HTR 124D	HTR	100 W	N/A	1	Less than 5 horsepower

FIRE ZONE: 3A		FIRE COMPARTMENT: RB-J				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-AC-P	ANN MUX CABINET P AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-P	ANN MUX P	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SPR1	MOT SPACE HTR PNL SPR1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-SWGR-4160F	4160 V SWGR F	SWGR	4160V	15	11	HEAF
EE-SWGR-4160F	4160 V SWGR F	SWGR	4160V	16b	11	HEAF
EE-SWGR-480F	480V CRIT SWGR 1F	SWGR	480V	15	5	HEAF
EE-SWGR-480F	480V CRIT SWGR 1F	SWGR	480V	16a	5	HEAF
EE-XFMR-480F	480VAC CRIT SWGR XFMR F	XFMR	2000 kVA	23b	1	
EE-XFMR-SPR1	XFMR F/ MOT SPACE HTR PNL SPR1	XFMR	30 kVA	N/A	1	Less than 45 kVA
	BUS DUCT	BUS		16b	10	
HV-FAN- EF-SWGR-1F	CONTR BLDG VENT VANEAXIAL EXH FAN 1F	FAN		26	1	
HV-FAN- SF-SWGR-1F	CONTR BLDG VENT VANEAXIAL SF 1F	FAN	15 hp	26	1	
HV-STR-ECBHI	STRR F/ ESS CONTR BLDG SYS DIV I	PNL	480 VAC	15	1	Non-ventilated

FIRE ZONE: 3B		FIRE COMPARTMENT: RB-K				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-SPR2	MOT SPACE HTR PNL SPR2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-SWGR-4160G	4160 V SWGR G	SWGR	4160V	15	11	HEAF
EE-SWGR-4160G	4160 V SWGR G	SWGR	4160V	16b	11	HEAF
EE-SWGR-480G	480V CRIT SWGR 1G	SWGR	480V	15	5	HEAF
EE-SWGR-480G	480V CRIT SWGR 1G	SWGR	480V	16a	5	HEAF
EE-XFMR-480G	480VAC CRIT SWGR XFMR G	XFMR	2000 kVA	23b	1	
EE-XFMR-SPR2	XFMR F/ MOT SPACE HTR PNL SPR2	XFMR	30 kVA	N/A	1	Less than 45 kVA
	BUS DUCT	BUS		16b	10	
HV-FAN- EF-SWGR-1G	CONTR BLDG VENT VANEAXIAL EXH FAN 1G	FAN		26	1	
HV-FAN- SF-SWGR-1G	CONTR BLDG VENT VANEAXIAL SF 1G	FAN	15 hp	26	1	
HV-STR-ECBHII	STRR F/ ESS CONTR BLDG SYS DIV II	PNL	480 VAC	15	1	Non-ventilated
LRP-RACK- LIR-HV-C-A	C BLDG HV UNIT 1-HV-C-1A LIR	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-LIR-HV-C-RF	C BLDG RECIRC FAN LIR	RACK		15	1	Non-ventilated - Not Secured

FIRE ZONE: 3C		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-MCC-V	MCC-V	MCC		15	4	
EE-PNL-LPR2G	LP LPR2G	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPR2G	XFMR F/ LP LPR2G	XFMR	30 kVA	N/A	1	Less than 45 kVA
HV-FAN- HF-R-1B	RACK HOOD (SR-1C) BF	FAN	<5 hp	N/A	1	Less than 5 horsepower
HV-FAN- HF-R-1C	BF F/ SP-1 HOOD EXH	FAN	<5 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 25-6	RX VES INSTR RACK 25-6	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-6-001	RX PROT PNL 25-6-001	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR118A	RHR SYS AUX RACK 118A	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR118B	RHR SYS AUX RACK 118B	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR179	REC PRESS INST CND & TB SUPPORT	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR180	REC HX OUTLET PRESS INST RACK	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-SRC	RB SAMPLG RACK 1C	RACK		15	1	Non-ventilated - Robustly Secured
REC-P-A	REACTOR EQUIP COOL P A	PMP	75 hp	21	1	
REC-P-B	REACTOR EQUIP COOL P B	PMP	75 hp	21	1	
REC-P-C	REACTOR EQUIP COOL P C	PMP	75 hp	21	1	
REC-P-D	REACTOR EQUIP COOL P D	PMP	75 hp	21	1	

FIRE ZONE: 3D		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-CPCADA	CPP CP-CAD-A	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR-TSC	CONTACT F/ TSC EMERG PWR	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-XFMR-CPCADA	XFMR F/ CPP CP-CAD-A	XFMR	15 kVA	N/A	1	Less than 45 kVA
LRP-PNL- 25-2-1	RWCU SYS INSTR RACK 25-2-1	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-5	RX VES INSTR RACK 25-5	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-5-001	RX PROT RACK 25-5-001	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 3E-1		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACAD-CPSR-B	SPARE	CPSR		N/A	1	Electrically Disconnected
EE-MCC-CB	MCC-CB	MCC		15	4	
EE-PNL-CPCADB	CPP CP-CAD-B	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-CPCADB	XFMR F/ CPP CP-CAD-B	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-FAN- BF-R-1A	RB HVAC BF	FAN		26	1	
HV-FAN- BF-R-1B	RB HVAC BF	FAN		26	1	
LRP-PNL- 25-2	RX WTR CLEANUP SYS INSTR RACK 25-2	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-20	RWCU SYS INSTR RACK 25-20	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-R-BF	RB BF LOC INSTR RACK HV-R-BF	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR115	RB RWCU SEP SV RACK 115	PNL		15	1	Non-ventilated - Not Secured
RW-P-RPSDP	RWCU PH SEP DECANT P	PMP	1 hp	N/A	1	Less than 5 horsepower
RW-P-RPSSP	RWCU PH SEP SLUDGE P	PMP	30 hp	21	1	
	RX 931 WORKSTATION 2	PNL		15	1	

FIRE ZONE: 3E-2		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACAD-CPSR-C	SPARE	CPSR		N/A	1	Electrically Disconnected
EE-MCC-CA	MCC-CA	MCC		15	3	
EE-MCC-N	MCC-N	MCC		15	5	
HPI-CS-RB1	CAMERA CONN POINT RB1	PNL		15	1	Non-ventilated - Not Secured
RWCU-P-A	RWCU RECIRC P A	PMP	60 hp	21	1	
RWCU-P-B	RWCU RECIRC P B	PMP	60 hp	21	1	

FIRE ZONE: 4A		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-MCC-M	MCC-M	MCC		15	5	
EE-MCC-RA	MCC-RA	MCC		15	5	
EE-MCC-U	MCC-U	MCC		15	6	
EE-PNL-LPR2F	LP LPR2F	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR-1310MV	STR F/ PC-1310MV	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-DA REC	STARTER F/REC DEAERATOR VACUMM PUMP	PNL		15	1	PRA Component - Non-ventilated
EE-STR-DEM	480V FUSED SUPPLY TO FDEM-A	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-XFMR-LPR2F	XFMR F/ LTG PNL LPR2F & LPR3F	XFMR	30 kVA	N/A	1	Less than 45 kVA
LRP-RACK-139	CONTAINMENT PRESS & LEVEL INST RACK	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-140	CONTAINMENT PRESS & LEVEL INST RACK	RACK		15	1	Non-ventilated - Robustly Secured
REC-MOT-CATA	MOT F/ REC CHEM ADD TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
REC-P-BP	FDEM-A BOOSTER P	PMP	1 hp	N/A	1	Less than 5 horsepower
REC-P-CMP	REC CHEM M P	PMP	1/3 hp	N/A	1	Less than 5 horsepower
REC-P-DA	REC DEAERATOR VACUUM PUMP	PMP	1 hp	N/A	1	Less than 5 horsepower
REC-PNL-DA	REC DEAERATOR SKID LOCAL CNTRL PANEL	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 4B		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H13	RHR HX A HST H13 (BLDG-HST-H13)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
HV-FAN- SF-R-1A-A	HV-R-1A SF	FAN	100 hp	26	1	
HV-FAN- SF-R-1A-B	HV-R-1A SF	FAN	100 hp	26	1	
LRP-RACK- LIR-HV-R-A	RB HV UNIT 1-HV-R-1A LOC INSTR RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source

FIRE ZONE: 4C		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H11	CRD REP AREA CRN H11 (BLDG-HST-H11)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H14	RHR HX B HST H14 (BLDG-HST-H14)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-PNL-CRDF	ELEC PNL SUPPLY FOR CRD REBUILD RM	PNL		15	1	Non-ventilated - Not Secured
EE-STR-125RX ALOP-A	STR F/ RR MG AUX LO P A	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RX ALOP-B	STR F/ RR MG AUX LO P B	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RX MO18	STR F/ RWCU-MO18	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STR-125RX MO77	STR F/ MS-MO77	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-125RX	125VDC RB STRR	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-XFMR-CRDF	CRD REBUILD ROOM SUPPLY TRANSFORMER	XFMR	30 kVA	N/A	1	Less than 45 kVA
FPC-P-A	FUEL POOL COOL P A	PMP	60 hp	21	1	
FPC-P-B	FUEL POOL COOL P B	PMP	60 hp	21	1	
LRP-PNL- 12-4-129A	RWCU FDEM V LOC PNL 12-4-129A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 12-4-129B	RWCU FDEM V LOC PNL 12-4-129B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 12-4-130A	RWCU FDEM SOL V RACK 12-4-130A	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 12-4-130B	RWCU FDEM SOL V RACK 12-4-130B	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 12-4-131A	RWCU FDEM SOL V RACK 12-4-131A	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-PNL- 12-4-131B	RWCU FDEM SOL V RACK 12-4-131B	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-PNL- 12-4-98A	RWCU FDEM LOC PNL 12-4-98A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 12-4-98B	RWCU FDEM LOC PNL 12-4-98B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 12-4-99	FDEM SYS INSTR RACK 12-4-99	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 25-16	FUEL POOL COOL PNL 25-16	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-32	RWCU RACK 25-32	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR123	RWCU FDEM SV RACK 123	RACK	Instrument Rack	N/A	1	Not considered ignition source
RW-AG-RAFMXTA	RWCU ANION FLOC MIXING TK AG	MOT	<5 hp	N/A	1	Less than 5 horsepower
RW-AG-RCFMXTA	RWCU CATION FLOC MIXING TK AG	MOT	<5 hp	N/A	1	Less than 5 horsepower
RWCU-AG-PTA	PRECOAT TK AG	MOT	<5 hp	N/A	1	Less than 5 horsepower
RWCU-AG-RFTA	RESIN FD TK AG	MOT	3/4 hp	N/A	1	Less than 5 horsepower
RWCU-MOT-PTM	RWCU PRECOAT TK MX	MOT	3/4 hp	N/A	1	Less than 5 horsepower
RWCU-MOT-RFTM	RWCU RESIN FD TK MX	MOT	3/4 hp	N/A	1	Less than 5 horsepower
RWCU-P-HPA	RWCU HOLDING P A	PMP		21	1	
RWCU-P-HPB	RWCU HOLDING P B	PMP		21	1	
RWCU-P-PP	PRECOAT P	PMP	7-1/2 hp	21	1	

FIRE ZONE: 4D		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RRLO-P-A1	MG ST LO P A-1	PMP	40 hp	21	1	
RRLO-P-A2	MG ST LO P A-2	PMP	40 hp	21	1	
RRLO-P-A3	MG ST LO P A-3	PMP	40 hp	21	1	
RRLO-P-B1	MG ST LO P B-1	PMP	40 hp	21	1	
RRLO-P-B2	MG ST LO P B-2	PMP	40 hp	21	1	
RRLO-P-B3	MG ST LO P B-3	PMP	40 hp	21	1	
RRLO-P-ELOPC	MG ST EMERG LO P C	PMP	3/4 hp	N/A	1	Less than 5 horsepower
RRLO-P-ELOPD	MG ST EMERG LO P D	PMP	3/4 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 5A		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-AC- AC-CS-MP2	RR VIB MONITORING COMPUTER CABINET AC	AC	115V	N/A	1	Not considered ignition source
LRP-PNL- 25-19	STANDBY LIQ CONT SYS INSTR RACK 25-19	PNL		15	1	Non-ventilated - Robustly Secured
PC-AN-H2O2I	H2O2 DIV I SAMPLE PNL	PNL	480 VAC - Ventilated	15	1	
PC-AN-H2O2II	H2O2 DIV II SAMPLE PNL	PNL	480 VAC - Ventilated	15	1	
RR-CS-MP1	RR MOTOR/PUMP SETS VIBRATION MONITORING	PNL		15	1	Non-ventilated - Not Secured
RR-CS-MP2		PNL		15	1	Non-ventilated - Robustly Secured
SLC-AG-MIX	AG F/ SLC CHEM MIX TK	MOT	<5 hp	N/A	1	Less than 5 horsepower
SLC-HTR-C	SLC CHEM MIX TK HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
SLC-HTR-TK	SLC STORAGE TK HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
SLC-P-A	SLC P A	PMP	50 hp	21	1	
SLC-P-B	SLC P B	PMP	50 hp	21	1	
SLC-P-C	SLC MIXING TK XFER P	PMP	3/4 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 5B		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H12	RWCU FDEM ELEC HST H12 (BLDG-HST-H12)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-PNL-LPR3F	LP LPR3F	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SPR3	MOT SPACE HTR PNL SPR3	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-ECUA	XFMR FOR RRMG-A SCOOP TUBE POS	XFMR	2 kVA	N/A	1	Less than 45 kVA
EE-XFMR-ECUB	XFMR FOR RRMG-B SCOOP TUBE POS	XFMR	2 kVA	N/A	1	Less than 45 kVA
EE-XFMR-SPR3	XFMR F/ MOT SPACE HTR PNL SPR3	XFMR	30 kVA	N/A	1	Less than 45 kVA
HV-AC- CPU-40	RB NORMAL RANGE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-FAN- EF-R-1A	RB HVAC SYS EXH FAN	FAN		26	1	
HV-FAN- EF-R-1B	RB HVAC SYS EXH FAN	FAN		26	1	
HV-FAN- EF-R-1C	RX MG ST EXH FAN	FAN		26	1	
HV-FAN- EF-R-1D	RX MG ST EXH FAN	FAN		26	1	
LRP-PNL- 02-184-A	INSTR PNL 2-184-A	PNL		15	3	
LRP-PNL- 02-184-B	INSTR PNL 2-184-B	PNL		15	3	
LRP-RACK- LIR-HV-MG-EF	MG ST EXH FAN LOC INSTR RACK HV-MG-EF	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-R-EF	RB EXH FAN LOC INSTR RACK HV-R-EF	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-R-FP	RB FUEL POOL AREA HV LIR HV-R-FP	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-IUR-RRFCI		PNL	Ventilated	15	1	
RMV-P-40	RB HI RANGE NORM SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMV-P-40A	RB AUX P	PMP	<5 hp	N/A	1	Less than 5 horsepower
RMV-RM-3	EXHAUST SAMPLER	PNL	115 VAC - Ventilated	15	1	
RRFC-XFMR-2A	RECIRC FLOW CONTR CONSTANT VOLT XFMR 2A	XFMR		N/A	1	Included as part of the MG Sets
RRFC-XFMR-2B	RECIRC FLOW CONTR CONSTANT VOLT XFMR 2B	XFMR		N/A	1	Included as part of the MG Sets
RRLO-BLWR-OMEA	MG ST A FLUID DR OIL MIST ELIMINATOR	BLWR		N/A	1	Included as part of the MG Sets
RRLO-BLWR-OMEB	MG ST B FLUID DR OIL MIST ELIMINATOR	BLWR		N/A	1	Included as part of the MG Sets
RRMG-EXC-MGA	RRMG-A EXC	EXC		N/A	1	Included as part of the MG Sets
RRMG-EXC-MGB	RRMG-B EXC	EXC		N/A	1	Included as part of the MG Sets
RRMG-GEN-MGA	RRMG A GEN	GEN		22	1	MG Set
RRMG-GEN-MGB	RRMG B GEN	GEN		22	1	MG Set
RRMG-GEN-TACHA	TACHOMETER GEN F/ RRMG-A	GEN		N/A	1	Included as part of the MG Sets
RRMG-GEN-TACHB	TACHOMETER GEN F/ RRMG-B	GEN		N/A	1	Included as part of the MG Sets
RRMG-MOT-CVFA	RRMG-A CS VENT FAN	MOT	1/8 hp	N/A	1	Included as part of the MG Sets

FIRE ZONE: 5B		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RRMG-MOT-CVFB	RRMG-B CS VENT FAN	MOT	1/8 hp	N/A	1	Included as part of the MG Sets
RRMG-MOT-MGA	RRMG A DR MOT	MOT	7000 hp	N/A	1	Included as part of the MG Sets
RRMG-MOT-MGB	RRMG B DR MOT	MOT	7000 hp	N/A	1	Included as part of the MG Sets
RR-VRG-VR1A	RRMG-A VRG	VRG		N/A	1	Included as part of the MG Sets
RR-VRG-VR1B	RRMG-B VRG	VRG		N/A	1	Included as part of the MG Sets
RR-XFMR-T1A 1T	RRMG-A V REG REF XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T1A A1T	RRMG-A V REG REF XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T1B 1T	RRMG-B V REG REF XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T1B A1T	RRMG-B V REG REF XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T2A 4T	RRMG-A M PT	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T2A A4T	RRMG-A M PT	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T2B 4T	RRMG-B M PT	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T2B A4T	RRMG-B M PT	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T3A	RRMG-A GEN NEUT GRD XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T3B	RRMG-B GEN NEUT GRD XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T4A	RRMG-A V REG ES XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T4B	RRMG-B V REG ES XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T6A	RRMG-A V REG ES XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-T6B	RRMG-B V REG ES XFMR	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-TR1A	RRMG-A M TRANSDUCER	XFMR		N/A	1	Included as part of the MG Sets
RR-XFMR-TR1B	RRMG-B M TRANSDUCER	XFMR		N/A	1	Included as part of the MG Sets
SGT-FAN- EF-R-1E	SGT UNIT A FAN(EF-R-1E)	FAN		26	1	
SGT-FAN- EF-R-1F	SGT UNIT B FAN(EF-R-1F)	FAN		26	1	
	TRITAN PLUNGER PUMP	PMP		21	1	

FIRE ZONE: 6		FIRE COMPARTMENT: RB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C5	PORT TOOL BALANCER BLDG-HST-C5	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H20	RB CRN H20 (BLDG-HST-H20)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-PNL-LPR3G	LP LPR3G	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-MPR1	MISC PP MPR1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-MPR1	XFMR F/ MISC PP MPR1	XFMR	<45 KVA	N/A	1	Less than 45 kVA
TSE-CPSR-C	CPSR F/ REFUELING PLAT AIR SUPPLY UNIT	CPSR	1-1/2 hp	N/A	1	Less than 5 horsepower
TSE-CS-RPEA	REFUELING PLAT EQUIP ASSY CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
TSE-HST-FR	FRAM MTD HST F/ REFUELING PLAT	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
TSE-HST-J1	FUEL POOL JIB CRN HST (EAST JIB)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
TSE-HST-J2	FUEL POOL JIB CRN HST (WEST JIB)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
TSE-HST-MN	MN HST F/ REFUELING PLAT	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
TSE-HST-MR	MONORAIL HST F/ REFUELING PLAT	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
TSE-MOT-AHU	REFUELING FL AH MOT	MOT	10 hp	26	1	
TSE-PNL-FPSCP	FUEL POOL SIPPER CONTR PNL	PNL		15	1	Non-ventilated - Not Secured
TSE-XFMR-C	REFUEL PLAT AIR SUPP UNIT CONTR XFMR	XFMR	<45 KVA	N/A	1	Less than 45 kVA

FIRE ZONE: 7A		FIRE COMPARTMENT: CB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H7	SWBP ELEC HST H7 (BLDG-HST-H7)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-MCC-L	MCC-L	MCC		15	4	
EE-MCC-T	MCC-T	MCC		15	4	
EE-MCC-X	MCC-X	MCC		15	4	
EE-PNL-LPCB3	LP LPCB-3	PNL	480 VAC	15	1	Non-ventilated
EE-XFMR-LPCB 3A	TRANSFORMER (480V/120V)	XFMR	.5 kVA	N/A	1	Less than 45 kVA
FDN-P-X	SUMP P X	PMP	<5 hp	N/A	1	Less than 5 horsepower
HV-FAN- FC-C-1A	RHR SWBP RM FCU	FAN	30 hp	26	1	
HV-P- CTP-C-1A	CONTR BLDG CT CIRC P	PMP	5 hp	21	1	
IA-DRY-A	IA DRY A	AIR DRY		N/A	1	Enclosed - not ignition source
IA-DRY-B	IA DRY B	AIR DRY		N/A	1	Enclosed - not ignition source
IA-HTR-1A	A DRY HTR	HTR		N/A	1	Totally enclosed motor
IA-HTR-1B	B DRY HTR	HTR		N/A	1	Totally enclosed motor
IA-XFMR-1TA	AIR DRY A CONTR XFMR	XFMR	250 VA	N/A	1	Less than 45 kVA
IA-XFMR-1TB	AIR DRY B CONTR XFMR	XFMR	250 VA	N/A	1	Less than 45 kVA
LRP-PNL-710	AIR CPSR COOL CONTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-CT-C-A	LOCAL RACK	RACK		15	1	Non-ventilated - Not Secured
SA-CPSR-A	SA CPSR A	CPSR		9	1	Oil-Filled Compressor
SA-CPSR-B	SA CPSR B	CPSR		9	1	Oil-Filled Compressor
SA-CPSR-C	SA CPSR C	CPSR		9	1	Oil-Filled Compressor
SW-P-BPA	RHR SWBP A	PMP	1000 hp	21	1	
SW-P-BPB	RHR SWBP B	PMP	1000 hp	21	1	
SW-P-BPC	RHR SWBP C	PMP	1000 hp	21	1	
SW-P-BPD	RHR SWBP D	PMP	1000 hp	21	1	

FIRE ZONE: 7B		FIRE COMPARTMENT: CB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-STR-250HPCI RHR-MO17	STR F/ RHR-MO17	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STRR-250B	250VDC STRR	PNL	250 VDC	15	1	PRA Component - Non-ventilated
FDN-P-L1	SUMP P L-1	PMP	1.6 hp	N/A	1	Less than 5 horsepower
FDN-P-L2	SUMP P L-2	PMP	1.6 hp	N/A	1	Less than 5 horsepower
LRP-RACK-LR164	CPSR A INSTR RACK	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR165	CPSR B INSTR RACK	PNL	Instrument Rack	N/A	1	Not considered ignition source

FIRE ZONE: 8A		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-AC-01	ANN CENTRAL CONTR UNIT CABINET 01 AC	AC	115V	N/A	1	Not considered ignition source
ANN-AC-02	ANN CENTRAL CONTR UNIT CABINET 02 AC	AC	115V	N/A	1	Not considered ignition source
ANN-AC-A	ANN MUX CABINET A AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-00	ANN MUX CABINET A	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-01	ANN CCU CABINET 01	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-02	ANN CCU CABINET 02	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-MCC-LX	MCC-LX	MCC		15	3	
EE-MCC-TX	MCC-TX	MCC		15	2	
EE-PNL-LPCB2	LP LPCB2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPCB2	XFMR F/ LP LPCB2	XFMR	45 kVA	23b	1	
HV-XFMR-CRFD	CR FIRE SMOKE DMPR XFMR	XFMR	1.5 kVA	N/A	1	Less than 45 kVA
LRP-PNL- 9-30	RCIC REL CABINET 9-30	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL- 9-32	ESS I REL CABINET 9-32	PNL		15	3	PRA Component - Non-ventilated
LRP-PNL- 9-33	ESS I REL CABINET 9-33	PNL		15	3	PRA Component - Non-ventilated
LRP-PNL- 9-39	HPCI REL CABINET 9-39	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL- 9-41	INBOARD ISO V REL RACK 9-41	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL- 9-42	OUTBOARD ISO V REL RACK 9-42	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL- 9-45	AUTO BD REL CABINET 9-45	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL-C22	ARI ATWS RPT LOC CONTR PNL	PNL		15	1	Ventilated

FIRE ZONE: 8B		FIRE COMPARTMENT: CB-C				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-BAT-24 1B1	24VDC STA SERV BAT 1B1	BAT		1	1	
EE-BAT-24 1B2	24VDC STA SERV BAT 1B2	BAT		1	1	
EE-CHG-24 1B1	24VDC STA SERV BAT CHGR 1B1	CHG		10	1	
EE-CHG-24 1B2	24VDC STA SERV BAT CHGR 1B2	CHG		10	1	
EE-XFMR-CDP1B	XFMR F/ CRIT DISTR PNL CDP1B	XFMR	75 kVA	23b	1	
RPS-CC-RPSB	CC F/ RPS MG ST B	PNL		15	1	Non-ventilated - Not Secured
RPS-EPA-1B1	RPS MG ST B ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1B2	RPS MG ST B ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1B3	RPSPP1B ALT POWER SUPPLY ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1B4	RPSPP1B ALT POWER SUPPLY ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-GEN-RPSB	GEN F/ RPS MG ST B	GEN		N/A	1	Included as part of the MG Sets
RPS-MG-RPSB	RPS MOT GEN ST B	MG	25 hp	22	1	

FIRE ZONE: 8C		FIRE COMPARTMENT: CB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-BAT-24 1A1	24VDC STA SERV BAT 1A1	BAT		1	1	
EE-BAT-24 1A2	24VDC STA SERV BAT 1A2	BAT		1	1	
EE-CHG-24 1A1	24VDC STA SERV BAT CHGR 1A1	CHG		10	1	
EE-CHG-24 1A2	24VDC STA SERV BAT CHGR 1A2	CHG		10	1	
EE-PNL-CDP1A	CRIT DISTR PNL CDP1A	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-CDP1B	CRIT DISTR PNL CDP1B	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-XFMR-CDP1A	XFMR F/ CRIT DISTR PNL CDP1A	XFMR	75 kVA	23b	1	
RPS-CC-RPSA	CC F/ RPS MG ST A	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1A1	RPS MG ST A ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1A2	RPS MG ST A ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1A3	RPSPP1A ALT POWER SUPPLY ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-EPA-1A4	RPSPP1A ALT POWER SUPPLY ELEC PROT ASSY	PNL		15	1	Non-ventilated - Robustly Secured
RPS-GEN-RPSA	GEN F/ RPS MG ST A	GEN		N/A	1	Included as part of the MG Sets
RPS-MG-RPSA	RPS MOT GEN ST A	MG	25 hp	22	1	

FIRE ZONE: 8D		FIRE COMPARTMENT: CB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H5	CONTR BLDG ELEC HST H5 (BLDG-HST-H5)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-CHG-125 1C	125V 200A BAT CHGR 1C	CHG		10	2	
EE-CHG-250 1C	250VDC STA SERV BAT CHGR 1C	CHG		10	2	
EE-PNL-LOPSA	LP LOPS-A	PNL	480 VAC	15	1	Non-ventilated
HV-FAN- SF-SWGR-1A	DC SWGR RM 1A SF	FAN	1/2 hp	N/A	1	Less than 5 horsepower
HV-FAN- SF-SWGR-1B	DC SWGR RM 1B SF	FAN	1/2 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-C-1A	BATTERY ROOM 1A UNIT HEATER	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-C-1B	BATTERY ROOM 1B UNIT HEATER	HTR	<5 hp	N/A	1	Less than 5 horsepower
LRP-PNL-RGPA	RSWP GLAND WTR SUPPLY CONTR PNL A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-RGPB	RSWP GLAND WTR SUPPLY CONTR PNL B	PNL		15	1	Non-ventilated - Robustly Secured
SS-XFMR-UPS2	IVTR-UPS2 XFMR	XFMR	15 kVA	N/A	1	Less than 45 kVA

FIRE ZONE: 8E		FIRE COMPARTMENT: CB-A-1				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-BAT-125 1A	125VDC STA SERV BAT 1A	BAT		1	1	
EE-BAT-250 1A	250VDC STA SERV BAT 1A	BAT		1	1	
EE-PNL-A	125VDC DISTR PNL A	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-AA2	125VDC PNL AA2	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-SW-A	125VDC DISTRIBUTION PANEL A TRANSFER SWITCH	PNL	125 VDC	15	1	Non-ventilated - Not Secured

FIRE ZONE: 8F		FIRE COMPARTMENT: CB-B				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-BAT-125 1B	125VDC STA SERV BAT 1B	BAT		1	1	
EE-BAT-250 1B	250VDC STA SERV BAT 1B	BAT		1	1	
EE-PNL-B	125VDC DISTR PNL B	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-BB2	125VDC PNL BB2	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-SW-B	125VDC DISTRIBUTION PANEL B TRANSFER SWITCH	PNL	125 VDC	15	1	Non-ventilated - Not Secured

FIRE ZONE: 8G		FIRE COMPARTMENT: CB-B				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-CHG-125 1B	125VDC STA SERV BAT CHGR 1B	CHG		10	2	
EE-CHG-250 1B	250VDC STA SERV BAT CHGR 1B	CHG		10	2	
EE-PNL-BB4	DC PP BB4 DIV II	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-SWGR-125 1B	125VDC 1B SWGR	SWGR		15	3	
EE-SWGR-250 1B	250VDC SWGR BUS 1B (DIV II)	SWGR		15	2	
HV-PNL-ECBHII	LOC PNL F/ ESSENTIAL C BLDG SYS DIV II	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 8H		FIRE COMPARTMENT: CB-A-1				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-CHG-125 1A	125VDC STA SERV BAT CHGR 1A	CHG		10	2	
EE-CHG-250 1A	250VDC STA SERV BAT CHGR 1A	CHG		10	2	
EE-IVTR-1A	NBPP IVTR 1A	IVTR	Ventilated	15	2	
EE-PNL-AA4	DC PP AA4 DIV I	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-SWGR-125 1A	125VDC 1A SWGR	SWGR		15	3	
EE-SWGR-250 1A	250VDC SWGR BUS IA (DIV I)	SWGR		15	2	
HV-PNL-ECBHI	ESSENT CONTR BLDG SYS DIV I LOC PNL	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 9A		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-MUX-D	ANN MUX D	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-E	ANN MUX E	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-F	ANN MUX F	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-G	ANN MUX G	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-H	ANN MUX H	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-I	ANN MUX I	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-J	ANN MUX J	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-K	ANN MUX K	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-L	ANN MUX L	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
ANN-MUX-M	ANN MUX M	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-CCP1A	CRIT CONTR PNL CCP1A	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-CCP1B	CRIT CONTR PNL CCP1B	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-CPP	CRIT INST & CPP	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-DCA	24VDC PP DC-A	PNL	24 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-DCB	24VDC PP DC-B	PNL	24 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-NBPP	NBPP	PNL	115/230 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-RPSPP1A	RPSPP RPSPP1A	PNL	120 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-RPSPP1B	RPSPP RPSPP1B	PNL	120 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-UPPCA	PP UPP-C-A	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-UPS1A	PMIS UPS MN PNL	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-UPS1B	PMIS UPS SUB PNL	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-NBPP	XFMR F/ EMERG FDR TO NBPP	XFMR	25 kVA	23b	1	PRA Component - Less than 45 kVA
HV-AC- AC-C-1A	MN CR ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- BF-C-1B	CA RM HVAC EXH FAN	FAN		26	1	
LRP-PNL-PL1	FOXBORO PNL PL1-DIV I	PNL	Ventilated	15	1	Ventilated
LRP-PNL-PL2	FOXBORO PNL PL2-DIV II	PNL	Ventilated	15	1	Ventilated
PC-CS-H2_O2I	CONTAINMENT H2/O2 REMOTE PNL DIV I	PNL	120 VAC - Ventilated	15	1	Ventilated
PC-CS-H2_O2II	CONTAINMENT H2/O2 REMOTE PNL DIV II	PNL	120 VAC - Ventilated	15	1	Ventilated
PMIS-MUX-LNK2	PMIS DATA ACQUISITION LINK	PNL	115 VAC - Ventilated	15	1	Ventilated
PMIS-MUX-LNK6	CLASS 1E PMIS DATA ACQUISITION LINK	PNL	115 VAC - Ventilated	15	1	Ventilated
PMIS-MUX-LNK7	CLASS 1E PMIS DATA ACQUISITION LINK	PNL	115 VAC - Ventilated	15	1	Ventilated
RFC-CC-1A	SPU 1A	PNL	Ventilated	15	1	Ventilated
RFC-CC-1B	SPU 1B	PNL	Ventilated	15	1	Ventilated

FIRE ZONE: 9A		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
SS-BAT-UPS2	125V BAT UPS2	PNL	125 VDC - Ventilated	15	1	Ventilated
SS-IVTR-UPS2	IVTR UPS2 SS	IVTR	Ventilated	15	1	Ventilated
SS-SW-BYPASS		PNL	300 VAC	N/A	1	Less than 4 Switches
SS-SW-STATIC		PNL	120/240 VAC	N/A	1	Less than 4 Switches
	APARS BOARD PANEL	PNL	Ventilated	15	1	Ventilated
	RTD CABINET B	PNL		N/A	1	Less than 4 Switches
	COMPUTER DIGITAL CABINET B	PNL		N/A	1	Less than 4 Switches
	THERMOCOUPLE CABINET B	PNL		N/A	1	Less than 4 Switches
LRP-PNL-ARC-CCP	CPP AUX RELAY CABINET	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL-ARC-CCP1A	CCP1A AUX RELAY CABINET	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL-ARC-CCP1B	CCP1B AUX RELAY CABINET	PNL		15	1	PRA Component - Non-ventilated
LRP-PNL-ARC-NBPP	NBPP AUX RELAY CABINET	PNL		15	1	PRA Component - Non-ventilated
	C6P XFMR	XFMR	3 kVA	N/A	1	Less than 45 kVA
	C7P XFMR	XFMR	3 kVA	N/A	1	Less than 45 kVA
	XFMR C2P to C2PA SECURITY SYSTEM	XFMR	5 kVA	N/A	1	Less than 45 kVA
	CPP TRANSFER SWITCH	PNL		15	1	Non-ventilated - Robustly Secured
	ANNUNCIATOR POWER SUPPLY CAB A	PNL		15	1	Non-ventilated - Robustly Secured
	ANNUNCIATOR POWER SUPPLY CAB B	PNL		15	1	Non-ventilated - Robustly Secured
	ANNUNCIATOR POWER SUPPLY CAB C	PNL		15	1	Non-ventilated - Robustly Secured
	ANNUNCIATOR POWER SUPPLY CAB D	PNL		15	1	Non-ventilated - Robustly Secured
	ISOLATION RELAY CABINET A	PNL		15	1	Non-ventilated - Robustly Secured
	ISOLATION RELAY CABINET B	PNL		15	1	Non-ventilated - Robustly Secured
	ISOLATION RELAY CABINET C	PNL		15	1	Non-ventilated - Robustly Secured
	ISOLATION RELAY CABINET D	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 9B		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- FC-CH-1A	CA EXP RM FCU	FCU	<5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 10A		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CABINET 40-23		PNL		15	1	Non-ventilated - Not Secured
CABINET 40-24		PNL		15	1	Non-ventilated - Not Secured
CABINET 40-25		PNL		15	1	Non-ventilated - Not Secured
CABINET 40-26		PNL		15	1	Non-ventilated - Not Secured
CABINET 40-27		PNL	Ventilated	15	4	
CABINET 40-28		PNL		15	1	Non-ventilated - Not Secured
EE-PNL-LPCB2A	LP LPCB2A	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
HV-AC- AC-C-1B	COMPUTER RM ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- AC-C-1C	COMPUTER RM DIRECT EXP CDSR 1C	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- AC-C-1D	COMPUTER RM DIRECT EXP CDSR 1D	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- AC-C-1E	COMPUTER RM ACU 1E	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- AC-C-1F	COMPUTER RM ACU 1F	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-CS- AC-C-1B	SPARED IN PL	PNL		N/A	1	Spared in Place
HV-FAN- BF-C-1A	CR EMERG FAN	FAN		26	1	
HV-FAN- SF-C-1C	COMPUTER RM AC UNIT SF	FAN	2 hp	N/A	1	Less than 5 horsepower
HV-FAN- SF-C-1D	COMPUTER RM AC UNIT SF SPARED IN PL	FAN		26	1	
HV-FAN- SF-C-1E	COMPUTER RM FRESH AIR SF & MOT	FAN	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-C-1A	COMPUTER RM FRESH AIR SUPP DUCT HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
LRP-RACK- LIR-AC-C-B	COMPUTER RM AC UNIT 1-AC-C-1B LIR	RACK		15	1	Non-ventilated - Not Secured
PNL 9-86	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-100	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-101	RPIS/RWM D/A POWER SUPPLIES	PNL	Ventilated	15	1	
PNL-9-102	RPIS/RWM COMPUTER & DATA ACQ	PNL	Ventilated	15	1	
PNL-9-103	PMIS A DATA ACQUISITION	PNL	Ventilated	15	1	
PNL-9-104	PMIS A COMPUTER	PNL	Ventilated	15	1	
PNL-9-105	PMIS PERIPHERAL SWITCH	PNL	Ventilated	15	1	
PNL-9-106	PMIS B COMPUTER	PNL	Ventilated	15	1	
PNL-9-107	PMIS B DATA ACQUISITION	PNL	Ventilated	15	1	
PNL-9-108		PNL	Ventilated	15	1	
PNL-9-109		PNL	Ventilated	15	1	
PNL-9-110		PNL	Ventilated	15	1	
PNL-9-87	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-88	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	

FIRE ZONE: 10A		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
PNL-9-89	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-90	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-91	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-92	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-93	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-94	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-95	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-96	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-97	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-98	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
PNL-9-99	PMIS DATA ACQUISITION LINK	PNL	Ventilated	15	1	
SS-PNL-CPU1		PNL	Ventilated	15	1	
SS-PNL-CPU2		PNL	Ventilated	15	1	
	TELECOM CABINET #3	PNL	Ventilated	15	3	
	DEH COMPUTER CABINET 00	PNL	Ventilated	15	2	
	DEH COMPUTER CABINET 01	PNL	Ventilated	15	2	

FIRE ZONE: 10B		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-CBPP	PNL CBPP	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-DDP1	DIMMING DISTR PNL CKT 1-4)	PNL		15	1	Non-ventilated - Not Secured
EE-PNL-DDP2	DIMMING DISTR PNL CKT 5-8)	PNL		15	1	Non-ventilated - Not Secured
EE-PNL-DDP3	DIMMING DISTR PNL CKT 9-12)	PNL		15	1	Non-ventilated - Not Secured
EE-PNL-LPCB1	LP LPCB1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPCEM1	LP LPCEM1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-CBPP	XFMR F/ PNL CBPP	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPCB1	XFMR F/ LP LPCB1	XFMR	45 kVA	23b	1	
EE-XFMR-LPCEM1	XFMR F/ LP LPCEM1	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-FAN- EF-C-1B	MN CR EXH FAN	FAN	< 5 HP	N/A	1	Less than 5 horsepower
LRP-PNL- 9-10	PRCS RM VERT BD 9-10	PNL	Ventilated	15	2	
LRP-PNL- 9-11	AREA CABINET 9-11	PNL	Ventilated	15	1	
LRP-PNL- 9-12	STARTUP RANGE NM CABINET 9-12	PNL	Ventilated	15	3	
LRP-PNL- 9-13	TIP CONTR & M CABINET 9-13	PNL	Ventilated	15	2	
LRP-PNL- 9-14	PWR RANGE NM CABINET 9-14	PNL	Ventilated	15	5	
LRP-PNL- 9-15	CH A PCIS & RPS SYS VBD 9-15	PNL	Ventilated	15	3	
LRP-PNL- 9-16	RX PROT SYS TEST M VERT BD 9-16	PNL	Ventilated	15	1	
LRP-PNL- 9-17	CH B PCIS & RPS SYS VBD 9-17	PNL	Ventilated	15	3	
LRP-PNL- 9-18	FW & RECIRC VERT BD 9-18	PNL	Ventilated	15	2	
LRP-PNL- 9-19	PRCS INSTR VERT BD 9-19	PNL	Ventilated	15	1	
LRP-PNL- 9-2	AREA PRCS RR VERT BD 9-2	PNL	Ventilated	15	2	
LRP-PNL- 9-21	NUCLEAR STM TR VERT BD 9-21	PNL	Ventilated	15	3	
LRP-PNL- 9-27	CONT RD POS INFO SYS CABINET 9-27	PNL	Ventilated	15	3	
LRP-PNL- 9-28	CRD SEL REL VERT BD 9-28	PNL	Ventilated	15	5	
LRP-PNL- 9-3	REACTOR CONTAINMENT ISO BENCH BD 9-3	PNL		N/A	5	Included in Main Control Board
LRP-PNL- 9-38	JET P INSTR CABINET 9-38	PNL	Ventilated	15	1	
LRP-PNL- 9-4	RWCU RECIRC BENCH BD 9-4	PNL		N/A	6	Included in Main Control Board
LRP-PNL- 9-5	REACTOR CONTROLBENCH BD 9-5	PNL		N/A	5	Included in Main Control Board
LRP-PNL-A	FW COND CIRC & SW BENCH BD-A	PNL		N/A	2	Included in Main Control Board
LRP-PNL-B	TU & AUX BENCH BD-B	PNL		N/A	3	Included in Main Control Board
LRP-PNL-C	GEN ELEC BENCH BD-C	PNL		N/A	5	Included in Main Control Board
LRP-PNL-E	PLANT EQUIP TEMP R VERT BD-E	PNL	Ventilated	15	4	
LRP-PNL-F	GEN & XFMR PROT VERT BD-F	PNL	Ventilated	15	5	

FIRE ZONE: 10B		FIRE COMPARTMENT: CB-D				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LRP-PNL-FP	SPKLR CONTR & FIRE ALM PNL-FP	PNL	Ventilated	15	3	VBD-FP
LRP-PNL-G	CONVERTER & PWR SUPPLY VERT BD-G	PNL	Ventilated	15	6	
LRP-PNL-H	PRIME CONTAIN VENT & N2 INERT VERT BD-H	PNL	Ventilated	15	2	VBD-H
LRP-PNL-J	C-932(VBD-J) MISC CONTR VERT BD-J	PNL	Ventilated	15	2	VBD-J
LRP-PNL-K	GAS TREAT & VENT VERT BD-K	PNL	Ventilated	15	2	VBD-K
LRP-PNL-M	COOL WTR SYS VERT BD-M	PNL	Ventilated	15	2	VBD-M
LRP-PNL-P1	PC SBNI TRAIN A CONTR PNL BOARD VPB-P1	PNL	Ventilated	15	2	VBD-P1
LRP-PNL-P2	PC SBNI TRAIN B CONTR PNL BOARD VPB-P2	PNL	Ventilated	15	2	VBD-P2
LRP-PNL-Q	RAD VENT MONITORING SYS VERT BD-Q	PNL	Ventilated	15	2	
LRP-PNL-R	HV VERT BD-R	PNL	Ventilated	15	2	VBD-R
LRP-PNL-S	H2600 SUMP P CONTR VERT BD-S	PNL	Ventilated	15	1	VBD-S
LRP-RACK-CRLAN01	RACK FOR RECORDER ETHERNET EQUIP	RACK	Ventilated	15	1	
LRP-RACK-CRLAN02	RACK FOR ETHERNET EQUIPMENT	RACK		N/A	1	Empty Rack
PMIS-MUX-LNK3	PMIS DATA ACQUISITION LINK (PNL-9-80)	PNL	115 VAC - Ventilated	15	1	
RMV-CAM-20		PNL	120 VAC - Ventilated	15	1	
SS-CC-SAS	SS SAS	PNL	120 VAC - Ventilated	15	7	
	SEISMIC MONITORING PANEL	PNL	Ventilated	15	1	
	MAIN CONTROL BOARD	MCB		4	1	Main Control Board Includes Several Panels

FIRE ZONE: 11A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LO-P-T	MN LO XFER P	PMP	10 hp	21	1	
LO-TK-ST	TU LO STORAGE TK	TNK		N/A	1	
	T/G OIL	TURB OIL		35	1	

FIRE ZONE: 11B		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-OWC2	TROLLEY HOIST-DEPLETED ZINC OXIDE SKID	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
CM-P-CT	COND XFER P	PMP	15 hp	N/A	1	Spared in place
CW-P-VPA	VAC PRIMING P A	PMP	75 hp	21	1	
CW-P-VPB	VAC PRIMING P B	PMP	75 hp	21	1	
EE-MCC-J	MCC-J	MCC		15	5	
EE-PNL-CPP1	CRIT INST & CPP CPP1	PNL	120/240 VAC	15	1	PRA Component - Non-ventilated
EE-PNL-LPTG3	LP LPTG3	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG4	LP LPTG4	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPTG4	XFMR F/ LP LPTG4	XFMR	30 kVA	N/A	1	Less than 45 kVA
FDN-P-V1	SUMP P V-1	PMP	3 hp	N/A	1	Less than 5 horsepower
FDN-P-V2	SUMP P V-2	PMP	3 hp	N/A	1	Less than 5 horsepower
H2-CBX-GDRY		PNL		15	1	Non-ventilated - Robustly Secured
H2-DRY-GA	GEN H2 GAS DRY TWR A	AIR DRY		N/A	1	Enclosed - not ignition source
H2-DRY-GB	GEN H2 GAS DRY TWR B	AIR DRY		N/A	1	Enclosed - not ignition source
H2-M-H1	GENERATOR CONDITION MONITOR	PNL	125 VDC - Ventilated	15	1	
H2-R-H1		PNL	Ventilated	15	1	
LRP-RACK-LR105	H2 COOL LOC RACK 105	PNL		15	1	Non-ventilated - Robustly Secured
	T/G HYDROGEN	GEN H2		34	1	

FIRE ZONE: 11C		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
FDN-P-U1	SUMP P U-1	PMP	3 hp	N/A	1	Less than 5 horsepower
FDN-P-U2	SUMP P U-2	PMP	3 hp	N/A	1	Less than 5 horsepower
LO-P-AS	AIR SIDE SEAL OIL P	PMP	40 hp	21	1	
LO-P-ASB	AIR SIDE SEAL OIL BACKUP P	PMP	25 hp	21	1	
LO-P-HS	H2 SIDE SEAL OIL P	PMP	7-1/2 hp	21	1	

FIRE ZONE: 11D		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HPI-CS-TG1	CAMERA CONN POINT TG1	PNL		15	1	Non-ventilated - Not Secured
HV-FAN- HF-T-1A	BF F/ SR-1A HOOD EXH	FAN	1/2 hp	N/A	1	
LRP-RACK-SRA	TB SAMPLG RACK 1A	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-SRD	COND DR RACK	PNL		15	1	Non-ventilated - Not Secured
MS-P-SB	MS SAMPLE BOOSTER P	PMP	2 hp	N/A	1	Less than 5 horsepower
RF-P-DTPA	FW DR TK P A	PMP	1 hp	N/A	1	Less than 5 horsepower
RF-P-DTPB	FW DR TK P B	PMP	1 hp	N/A	1	Less than 5 horsepower
RF-P-DTPC	FW DR TK P C	PMP	1 hp	N/A	1	Less than 5 horsepower
RW-P-P1	TB EQUIP DR SUMP P P1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-P2	TB EQUIP DR SUMP P P2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-Q1	TB FL DR SUMP P Q1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-Q2	TB FL DR SUMP P Q2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-R1	TB FL DR SUMP P R1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-R2	TB FL DR SUMP P R2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-S1	TB FL DR SUMP P S1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-S2	TB FL DR SUMP P S2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-T1	TB EQUIP DR SUMP P T1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-T2	TB EQUIP DR SUMP P T2	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 11E		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H8A	A RFP HST H8A (BLDG-HST-H8A)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H8B	B-RFP HST H8B (BLDG-HST-H8B)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
RFLO-P-A1	RFLO P A-1	PMP	15 hp	21	1	
RFLO-P-A2	RFLO P A-2	PMP	15 hp	21	1	
RFLO-P-B1	RFLO P B-1	PMP	15 hp	21	1	
RFLO-P-B2	RFLO P B-2	PMP	15 hp	21	1	
RFLO-P-ELOA	EMERG DC LO P A	PMP	5 hp	21	1	
RFLO-P-ELOB	EMERG DC LO P B	PMP	5 hp	21	1	
RFLO-P-TA	RFLO XFER P A	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RFLO-P-TB	RFLO XFER P B	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RFLO-TK-A	RFPT A LO RESVR	TNK		N/A	1	
RFLO-TK-B	RFPT B LO RESVR	TNK		N/A	1	
RF-P-A	FW RFP A	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RF-P-B	FW RFP B	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RF-TU-A	FW RFP TU A & CVL	MOT	8850 hp	32	1	
RF-TU-B	FW RFP TU B & CVL	MOT	8850 hp	32	1	

FIRE ZONE: 11F		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LRP-RACK-IRD	TB LOC INSTR RACK 1D	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-IRE	TB LOC INSTR RACK 1E	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-IRF	TB LOC INSTR RACK 1F	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR161	RACK-LR161	RACK	Instrument Rack	N/A	1	Not considered ignition source
RF-CBX-1A		PNL		15	1	Non-ventilated - Robustly Secured
RF-CBX-1B		PNL		15	1	Non-ventilated - Robustly Secured
RFC-CC-2A	LEC 1A	PNL	Ventilated	15	1	
RFC-CC-2B	LEC 1B	PNL	Ventilated	15	1	
RFC-CC-3	REMOTE CABINET	PNL	Ventilated	15	1	
ST-P- SP-T-1A	TB SEW EJECTION SUMP P	PMP	3 hp	N/A	1	Less than 5 horsepower
	TELECOMMUNICATIONS FIBER DIST. BOX	PNL	Ventilated	15	1	

FIRE ZONE: 11G		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
AR-AE-SJAEA	SJAE A	MOT	25 hp	14	1	
AR-AE-SJAEB	SJAE B	MOT	25 hp	14	1	
AR-FAN-GSCEA	GLAND ST CDSR EXH A	FAN	25 hp	26	1	
AR-FAN-GSCEB	GLAND ST CDSR EXH B	FAN	25 hp	26	1	

FIRE ZONE: 11H		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
AR-P-MVA	MECH VAC P A	PMP	150 hp	21	1	
AR-P-MVB	MECH VAC P B	PMP	150 hp	21	1	

FIRE ZONE: 11J		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-6	COND BOOSTER P HST I BEAM BLDG-HST-CP	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-CP	COND P ELEC HST CP (BLDG-HST-CP)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-MCC-D	MCC-D	MCC		15	6	
EE-PNL-LPTG1	LP LPTG1	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG2	LP LPTG2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR-250TURB ASSOBUP	STR F/ AIR SIDE SEAL OIL BACKUP P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250TURB MTEOP	STR F/ MN TU EMERG OIL P	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250TURB RFPTEOP-A	STR F/ FD RFPT EMERG OIL P A	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-250TURB RFPTEOP-B	STR F/ FD RFPT EMERG OIL P B	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-STR-301MV	STR F/ MC-301MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STR-302MV	STR F/ MC-302MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STR-303MV	STR F/ MC-303MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STRR-250TURB	250VDC TB STRR	PNL	250 VDC	15	1	PRA Component - Non-ventilated
EE-SW-250TURB	XFER SW F/ 250VDC TB STRR	PNL	250 VDC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPTG2	XFMR F/ LP LPTG2	XFMR	30 kVA	N/A	1	Less than 45 kVA
FDN-P-M1	SUMP P M-1	PMP	3 hp	N/A	1	Less than 5 horsepower
FDN-P-M2	SUMP P M-2	PMP	3 hp	N/A	1	Less than 5 horsepower
MC-P-A	COND P A	PMP	800 hp	21	1	
MC-P-B	COND P B	PMP	800 hp	21	1	
MC-P-BPA	COND BOOSTER P A	PMP	2500 hp	21	1	
MC-P-BPALOA	COND BOOSTER P A AUX LO P	PMP		N/A	1	Part of Booster Pumps
MC-P-BPALOB	COND BOOSTER P B AUX LO P	PMP		N/A	1	Part of Booster Pumps
MC-P-BPALOC	COND BOOSTER P C AUX LO P	PMP		N/A	1	Part of Booster Pumps
MC-P-BPB	COND BOOSTER P B	PMP	2500 hp	21	1	
MC-P-BPC	COND BOOSTER P C	PMP	2500 hp	21	1	
MC-P-BPLOA	COND BOOSTER P A LO P SHAFT DR	PMP		N/A	1	Part of Booster Pumps
MC-P-BPLOB	COND BOOSTER P B LO P SHAFT DR	PMP		N/A	1	Part of Booster Pumps
MC-P-BPLOC	COND BOOSTER P C LO P SHAFT DR	PMP		N/A	1	Part of Booster Pumps
MC-P-C	COND P C	PMP	800 hp	21	1	
MC-PNL-19	COND SYS AUX EQUIP PNL	PNL	Ventilated	15	1	
TEC-P-A	TEC P A	PMP	200 hp	21	1	

FIRE ZONE: 11J		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
TEC-P-B	TEC P B	PMP	200 hp	21	1	
TEC-P-C	TEC P C	PMP	200 hp	21	1	
	MAIN TURBINE EMERGENCY OIL PUMP PANEL	PNL	Ventilated	15	1	

FIRE ZONE: 11K		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LO-FAN-TOCV	TU OIL COND VENT	FAN	1/4 hp	N/A	1	Less than 5 horsepower
LO-P-C	LO CIRC P	PMP	5 hp	21	1	
	T/G OIL	TURB OIL		35	1	

FIRE ZONE: 11L		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: 12A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-AC-S	ANN MUX CABINET S AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-S	ANN MUX S	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-CAP-ISO A	A PH ISO PH SURGE CAP	SWGR	24 kV	15	1	HEAF
EE-CAP-ISO A	A PH ISO PH SURGE CAP	SWGR	24 kV	16b	1	HEAF
EE-CAP-ISO B	B PH ISO PH SURGE CAP	SWGR	24 kV	15	1	HEAF
EE-CAP-ISO B	B PH ISO PH SURGE CAP	SWGR	24 kV	16b	1	HEAF
EE-CAP-ISO C	C PH ISO PH SURGE CAP	SWGR	24 kV	15	1	HEAF
EE-CAP-ISO C	C PH ISO PH SURGE CAP	SWGR	24 kV	16b	1	HEAF
EE-MCC-B	MCC-B	MCC		15	8	
EE-MCC-G	MCC-G	MCC		15	8	
EE-PNL-LPTG7	LP LPTG7	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG8	LP LPTG8	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPTG8	XFMR F/ LP LPTG8	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-MGG	MN GEN GRD XFMR	XFMR	100 kVA	23b	1	
HV-FAN- SF-T-1C-A	HV-T-1C SF	FAN	40 hp	26	1	
HV-FAN- SF-T-1C-B	HV-T-1C SF	FAN	40 hp	26	1	
HV-MOT-BDC1	BUS DUCT COOL FAN MOT	MOT	75 hp	26	1	
HV-MOT-BDC2	BUS DUCT COOL FAN MOT	MOT	75 hp	26	1	
LO-FAN-ALSVE	AUX LOOP SEAL EXTRAC FAN	FAN	2 hp	N/A	1	Less than 5 horsepower
LO-FAN-GLSVE	GEN LOOP SEAL VAP EXTRAC	FAN	2 hp	N/A	1	Less than 5 horsepower
LO-TK-GLS	GEN LOOP SEAL TK	TNK		N/A	1	
LRP-RACK- LIR-HV-T-C	TB HV UNIT 1-HV-T-1C LIR	PNL		15	1	Non-ventilated - Not Secured
PMIS-MUX-LNK5	PMIS DATA ACQUISITION LINK (PNL-9-85)	PNL	115 VAC - Ventilated	15	1	
TGI-XFMR-RF1	RF MONITOR ISO XFMR	XFMR	.5 kVA	N/A	1	Less than 45 kVA
	TG CABINET FAN SELECTOR SWITCH BREAKER BOX	PNL	Ventilated	15	3	

FIRE ZONE: 12B		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-AC-C	ANN MUX CABINET C AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-C	ANN MUX C	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-MCC-C	MCC-C	MCC		15	8	
EE-MCC-H	MCC-H	MCC		15	9	
EE-PNL-CCP2A	CRIT CONTR PNL CCP2A	PNL	120/240 VAC	15	1	Non-ventilated - Not Secured
EE-PNL-CCP2B	CRIT CONTR PNL CCP2B	PNL	120/240 VAC	15	1	Non-ventilated - Not Secured
EE-XFMR-CBX5		XFMR	<45 kVA	N/A	1	Less than 45 kVA
HPI-CBX-5		PNL	Ventilated	15	1	
HPI-CS-TG3	CCTV CAMERA CONN/MONIT CABINET	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL- 17-116	OG RACK 17-116	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 17-136	OG VIAL SAMPLER 17-136	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-IRA	TB LOC INSTR RACK 1A	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-IRB	TB LOC INSTR RACK 1B	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR102	TB LOC RACK 102	PNL		15	6	Non-ventilated - Not Secured
LRP-RACK-LR103	TB LOC RACK 103	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR120	ST TP STA BYPASS V CONTR PNL 120	RACK		15	1	Non-ventilated - Robustly Secured
OG-P-OGS	OG SAMPLE P	PMP	<5 hp	N/A	1	Less than 5 horsepower
OG-P-OGV	OG VAC P	PMP	<5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 12C		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H4	HTR BAY PLUG HST H4 (BLDG-HST-H4)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-STR-PPTGSB 203MV	STR F/ MS-203MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STR-PPTGSB 204MV	STR F/ MS-204MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STR-PPTGSB 205MV	STR F/ MS-205MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STRR-PPTGSB	TB STRR PP-TG-SB	PNL		15	1	Non-ventilated - Robustly Secured
MS-HTR-143A	ST LEAK DETECTION TEST HTR 143A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-143B	ST LEAK DETECTION TEST HTR 143B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-143C	ST LEAK DETECTION TEST HTR 143C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-143D	ST LEAK DETECTION TEST HTR 143D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-144A	ST LEAK DETECTION TEST HTR 144A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-144B	ST LEAK DETECTION TEST HTR 144B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-144C	ST LEAK DETECTION TEST HTR 144C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-144D	ST LEAK DETECTION TEST HTR 144D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-145A	ST LEAK DETECTION TEST HTR 145A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-145B	ST LEAK DETECTION TEST HTR 145B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-145C	ST LEAK DETECTION TEST HTR 145C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-145D	ST LEAK DETECTION TEST HTR 145D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-146A	ST LEAK DETECTION TEST HTR 146A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-146B	ST LEAK DETECTION TEST HTR 146B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-146C	ST LEAK DETECTION TEST HTR 146C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-146D	ST LEAK DETECTION TEST HTR 146D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-147A	ST LEAK DETECTION TEST HTR 147A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-147B	ST LEAK DETECTION TEST HTR 147B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-147C	ST LEAK DETECTION TEST HTR 147C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-147D	ST LEAK DETECTION TEST HTR 147D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-148A	ST LEAK DETECTION TEST HTR 148A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-148B	ST LEAK DETECTION TEST HTR 148B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-148C	ST LEAK DETECTION TEST HTR 148C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-148D	ST LEAK DETECTION TEST HTR 148D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-149A	ST LEAK DETECTION TEST HTR 149A	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-149B	ST LEAK DETECTION TEST HTR 149B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-149C	ST LEAK DETECTION TEST HTR 149C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-149D	ST LEAK DETECTION TEST HTR 149D	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-150A	ST LEAK DETECTION TEST HTR 150A	HTR	100 W	N/A	1	Less than 5 horsepower

FIRE ZONE: 12C		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
MS-HTR-150B	ST LEAK DETECTION TEST HTR 150B	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-150C	ST LEAK DETECTION TEST HTR 150C	HTR	100 W	N/A	1	Less than 5 horsepower
MS-HTR-150D	ST LEAK DETECTION TEST HTR 150D	HTR	100 W	N/A	1	Less than 5 horsepower
TG-VRG-MAIN	MN GEN VRG	PNL		15	1	

FIRE ZONE: 12D		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-TJN	TU GEN BLDG JIB CRN	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
CO2-XFMR-HEX	CO2 HEX VAP XFMR	XFMR	0.1 kVA	N/A	1	Less than 45 kVA
EE-MCC-A	MCC-A	MCC		15	7	
EE-MCC-F	MCC-F	MCC		15	8	
EE-PNL-LPTG5	LP LPTG5	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG6	LP LPTG6	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SLDT2	ST LEAK DETECTION TEST PNL NU 2	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPTG6	XFMR F/ LP LPTG6	XFMR	30 kVA	N/A	1	Less than 45 kVA
HV-FAN- EF-T-1E	TB EXH FAN	FAN		26	1	
OWC-RACK-P100	HYDROGEN INJECTION MODULE	PNL		15	1	Non-ventilated - Robustly Secured
OWC-RACK-P200	OXYGEN/AIR INJECTION MODULE	PNL		15	1	Non-ventilated - Robustly Secured
OWC-RACK-P600	CONDENSATE OXYGEN INJECTION MODULE	PNL		15	1	Non-ventilated - Robustly Secured
PW-HTR-TGA	TB BATHROOM HW HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
TEC-MOT-CATA	MOT F/ TEC CHEM ADD TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
TEC-P-CM	TEC CHEM M P	PMP	1/3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 12E		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LO-FAN-ARVE	AUX LO RESVR EXTRAC FAN	FAN		26	1	
LO-FAN-RVE	LO RESVR VAP EXTRAC	FAN	5 hp	26	1	
LO-P-EB	EMERG DC BRG OIL P	PMP	60 hp	21	1	
LO-P-HPB	HI PRESS OIL BACKUP P	PMP	25 hp	21	1	
LO-P-MBL	MN BRG LIFT OIL P	PMP	40 hp	21	1	
LO-P-TG	TGR OIL P	PMP	60 hp	21	1	
LO-TK-R	TU LO RESVR	TNK		N/A	1	
	T/G OIL	TURB OIL		35	1	

FIRE ZONE: 12F		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: 13A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-TG	TB CRN	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-TJ	TG BLDG JIB CRN (BLDG-HST-TJ)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-PNL-IC	NQOB SQ D BRKR PNL	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG10	LP LPTG10	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG11	LP LPTG11	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG12	LP LPTG12	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG9	LP LPTG9	PNL	480 VAC	15	1	Non-ventilated
EE-XFMR-IC	SQ D XFMR 45T3H 45KVA 3PH	XFMR	45 kVA	23b	1	
EE-XFMR-LPTG10	XFMR F/ LP LPTG10	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPTG12	XFMR F/ LP LPTG12	XFMR	15 kVA	N/A	1	Less than 45 kVA
HPI-CS-TG2	CAMERA CONN POINT TG2	PNL		15	1	Non-ventilated - Not Secured
HV-ACU- AC-T-1A	I&C SHOP ACU CONDENSING UNIT	ACU		26	1	
HV-FAN- AC-T-1A	AOSC HEPA C F BOOSTER FAN	FAN		26	1	
HV-FAN- RF-T-1A	TG GEN AREA RECIRC. FAN	FAN		26	1	
HV-FAN- RF-T-1B	TG GEN AREA RECIRC. FAN	FAN		26	1	
HV-PNL- AC-T-1A	AOSC I&C SHOP HVAC PROG CONTROL PNL	PNL		15	1	Non-ventilated - Not Secured
LO-P-BL1	NU 1 BRG LIFT P	PMP	3 hp	N/A	1	Less than 5 horsepower
LO-P-BL2	NU 2 BRG LIFT P	PMP	3 hp	N/A	1	Less than 5 horsepower
LO-P-SD	SHAFT DR LO P	PMP		21	1	
LRP-PNL-T	MS-MI-A CONTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-PNL-TDT1	PP TDT1 480 V 400 A 3PH	PNL	480 VAC - Ventilated	15	1	
LRP-PNL-TDT2	PP TDT2 480 V 400 A 3PH	PNL	480 VAC - Ventilated	15	1	
LRP-PNL-U	MS-MI-B CONTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-PNL-V	MS-MI-C CONTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-PNL-W	MS-MI-D CONTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-PNL-X	MS-MI-A, B, C, D CNTR PNL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-T-A	TB HV UNIT 1-HV-T-1A LIR	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-T-B	TB HV UNIT 1-HV-T-1B LIR	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-IRC	TB LOC INSTR RACK 1C	PNL		15	3	Ventilated- Not Robust
LRP-RACK-LR131A	COND A VAC SW LOC RACK CH 1)LR-131A	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR131B	COND B VAC SW LOC RACK CH B LR-131B	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-TGTI	MN TU DR TEMP LOC RACK	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 13A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
MS-AOV-SVBP1	NU 1 STOP V BYPASS EQUAL	TB STOP VLV		21	1	
MS-AOV-SVBP2	NU 2 STOP V BYPASS EQUAL	TB STOP VLV		21	1	
TG-EPA-GD	MN TG CU BRAID GRD DEVICE	PNL	Ventilated	15	1	
TG-EXC-MAIN	MN EXC	T/G EXC		33	1	
TGF-P-A	DEH FLUID P A	PMP	30 hp	21	1	
TGF-P-B	DEH FLUID P B	PMP	30 hp	21	1	
TGF-P-T	DEH FLUID XFER P	PMP	3/4 hp	N/A	1	Less than 5 horsepower
TG-GEN-MAIN(TURBINE)	MN GEN	GEN		N/A	1	Addressed by T/G Oil & Hydrogen
TGI-PNL-1	TGI SUPERVISORY INSTRUMENT CABINET	PNL	Ventilated	15	1	
TG-XFMR-TG	TGR MOT CUR XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
	T/G OIL	TURB OIL		35	1	
	T/G HYDROGEN	GEN H2		34	1	

FIRE ZONE: 13B		FIRE COMPARTMENT: NCS				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ANN-MUX-03	ANN MUX 03	PNL	125 VDC	N/A	1	Included in ANN-MUX-B
ANN-MUX-04	ANN MUX 04	PNL	125 VDC	N/A	1	Included in ANN-MUX-B
ANN-MUX-B	ANNUNCIATOR MULTIPLEXER CABINET P	PNL	125 VDC - Ventilated	15	1	
EE-PNL- AC-T-1A	NON CRIT SWGR RM A/C UNIT REMOTE CP	PNL		15	1	Non-ventilated - Robustly Secured
EE-PNL-AA1	125VDC PNL AA1	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-BB1	125VDC PNL BB1	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-SPTG1	MOT SPACE HTR PNL SPTG1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SPTG2	MOT SPACE HTR PNL SPTG2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-SWGR-4160A	4160 V SWGR A	SWGR	4160V	15	10	HEAF
EE-SWGR-4160A	4160 V SWGR A	SWGR	4160V	16b	10	HEAF
EE-SWGR-4160B	4160 V SWGR B	SWGR	4160V	15	10	HEAF
EE-SWGR-4160B	4160 V SWGR B	SWGR	4160V	16b	10	HEAF
EE-SWGR-4160C	4160 V SWGR C	SWGR	4160V	15	3	HEAF
EE-SWGR-4160C	4160 V SWGR C	SWGR	4160V	16b	3	HEAF
EE-SWGR-4160D	4160 V SWGR D	SWGR	4160V	15	3	HEAF
EE-SWGR-4160D	4160 V SWGR D	SWGR	4160V	16b	3	HEAF
EE-SWGR-4160E	4160 V SWGR E	SWGR	4160V	15	7	HEAF
EE-SWGR-4160E	4160 V SWGR E	SWGR	4160V	16b	7	HEAF
EE-SWGR-480A	480V SWGR 1A	SWGR	480V	15	3	HEAF
EE-SWGR-480A	480V SWGR 1A	SWGR	480V	16a	3	HEAF
EE-SWGR-480B	480V SWGR 1B	SWGR	480V	15	4	HEAF
EE-SWGR-480B	480V SWGR 1B	SWGR	480V	16a	4	HEAF
EE-XFMR-480A	480VAC SWGR XFMR A	XFMR	1500 kVA	23b	1	
EE-XFMR-480B	480VAC SWGR XFMR B	XFMR	1500 kVA	23b	1	
EE-XFMR-SPTG1	XFMR F/ MOT SPACE HTR PNL SPTG1	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-SPTG2	XFMR F/ MOT SPACE HTR PNL SPTG2	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-AC- AC-T-1A	NON CRITICAL SWGR ROOM ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
	BUS DUCT	BUS		16b	38	HEAF
	BATTERY CHARGER/RECTIFIER (5.3ALT STRATEGY)	CHG		10	1	

FIRE ZONE: 13C		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FAN-AHU5	ELEC SHOP AH FAN	FAN		26	1	
	WALL MOUNTED TRANSFORMER	XFMR	<45 KVA	N/A	1	Less than 45 kVA

FIRE ZONE: 13D		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-ISP1	INST SHOP PNL ISP1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 14A		FIRE COMPARTMENT: DG-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C4A	NU 1 D-G HST C4 (BLDG-HST-C4A)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
DG-D-1	DG D ENG NU 1	DG		8	1	
DGDO-P-EDF1	ENG DR FUEL P 1	PMP		N/A	1	Included as part of Diesel Generator
DGDO-P-FB1	FUEL BOOSTER P 1	PMP	2 hp	N/A	1	Less than 5 horsepower
DG-GEN-DG1	DG1 GEN	GEN		N/A	1	Included as part of Diesel Generator
DGJW-HTR-JWH1	DG1 JACKET WTR HTR	HTR		N/A	1	Included as part of Diesel Generator
DGJW-P-EDJW1	DG1 ENG DR JW P	PMP		N/A	1	Included as part of Diesel Generator
DGJW-P-JWB1	DG1 JW BYPASS P	PMP		N/A	1	Included as part of Diesel Generator
DGLO-HTR-LOH1	DG1 LO HTR	HTR		N/A	1	Included as part of Diesel Generator
DGLO-P-BP1	DG1 LO BYPASS P	PMP	2 hp	N/A	1	Included as part of Diesel Generator
DGLO-P-EDLO1	DG1 ENG DR LO P	PMP		N/A	1	Included as part of Diesel Generator
DGLO-P-PPLO1	DG1 PREPOST LO P	PMP	10 hp	21	1	
DG-PNL-DG1 ECP	DG1 ENG CONTR PNL	PNL	Ventilated	15	1	
DG-REL-DG1	DG1 RELAY PANEL	PNL	125 VDC - Ventilated	15	2	
DGSA-CHG-DG1	AIR CPSR DG1A BAT CHGR	CHG		N/A	1	Included as part of Diesel Generator
DGSA-CPSR-1A	STRT AIR CPSR 1A	CPSR		N/A	1	Included as part of Diesel Generator
DGSA-CPSR-1B	STRT AIR CPSR 1B	CPSR		N/A	1	Included as part of Diesel Generator
DGSA-D-SAC1A	STRT AIR CPSR 1A D ENG	ENG		N/A	1	Included as part of Diesel Generator
DG-TGR-DG1	DG 1 TGR	TURB		N/A	1	Included as part of Diesel Generator
DG-VRG-DG1	DG1 VRG	VRG	4160V	15	1	HEAF
DG-VRG-DG1	DG1 VRG	VRG	4160V	16b	1	HEAF
DG-XFMR-DG1 GND	DG1 NEUT GRD XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
DG-XFMR-DG1 MVC	DG1 MAN V CONTR	XFMR	0.63 kVA	N/A	1	Less than 45 kVA
DG-XFMR-DG1 VARM	DG1 LOC VARMETER PH SHIFT XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
DG-XFMR-WT6	DG1 WT	XFMR	<45 kVA	N/A	1	Less than 45 kVA
EE-MCC-DG1	MCC-DG1	MCC		15	4	
EE-PNL-DG1	125VDC PNL DG1	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-LPDG1	LP LPDG1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-SWGR-4160DG1	4160 V SWGR DG1	SWGR	4160V	15	2	HEAF
EE-SWGR-4160DG1	4160 V SWGR DG1	SWGR	4160V	16b	2	HEAF
EE-XFMR-LPDG1	XFMR F/ LP LPDG1	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-MCCDG1	3PH 4160-480Y/277 VAC PWR XFMR	XFMR	250 kV	23b	1	
FDN-P-DG1	SUMP P DG-1	PMP	3 hp	N/A	1	Less than 5 horsepower
HV-FAN- EF-DG-1A	EXH FAN F/ D GEN RM 1	FAN	30 hp	26	1	

FIRE ZONE: 14A		FIRE COMPARTMENT: DG-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- HV-DG-1A	DG UNIT 1 VENT UNIT	FCU	5 hp	26	1	
HV-FCU- HV-DG-1C	DG UNIT 1 VENT UNIT	FCU	20 hp	26	1	
HV-P- CTP-DG-1A	HV-DG-1A CT CIRC P	PMP		21	1	
LRP-PNL- LCP-HV-DG-1A	DG BLDG HV LOC CONTR PNL HV-DG-1A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- LCP-HV-DG-2A	DG 1 BLDG HV LOC CONTR PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-DG-A	DG BLDG HV UNIT LIR	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK- LIR-HV-DG-C	DG BLDG HV UNIT LP-1-HV-DG-1C LIR	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR107A	DO SYS LOC PNL 107A	PNL		15	1	Non-ventilated - Not Secured

FIRE ZONE: 14B		FIRE COMPARTMENT: DG-B				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C4B	NU 2 D-G HST C4 (BLDG-HST-C4B)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
DG-D-2	DG D ENG NU 2	DG		8	1	
DGDO-P-EDF2	ENG DR FUEL P 2	PMP		N/A	1	Included as part of Diesel Generator
DGDO-P-FB2	FUEL BOOSTER P 2	PMP	2 hp	N/A	1	Less than 5 horsepower
DG-GEN-DG2	DG2 GEN	GEN		N/A	1	Included as part of Diesel Generator
DGJW-HTR-JWH2	DG2 JACKET WTR HTR	HTR		N/A	1	Included as part of Diesel Generator
DGJW-P-EDJW2	DG2 ENG DR JW P	PMP		N/A	1	Included as part of Diesel Generator
DGJW-P-JWB2	DG2 JW BYPASS P	PMP		N/A	1	Included as part of Diesel Generator
DGLO-HTR-LOH2	DG2 LO HTR	HTR		N/A	1	Included as part of Diesel Generator
DGLO-P-BP2	DG2 LO BYPASS P	PMP	2 hp	N/A	1	Included as part of Diesel Generator
DGLO-P-EDLO2	DG2 ENG DR LO P	PMP		N/A	1	Included as part of Diesel Generator
DGLO-P-PPLO2	DG2 PREPOST LO P	PMP	10 hp	21	1	
DG-PNL-DG2 ECP	DG2 ENG CONTR PNL	PNL	Ventilated	15	1	
DG-REL-DG2	DG2 RELAY PANEL	PNL	125 VDC - Ventilated	15	2	
DGSA-CHG-DG2	AIR CPSR DG2A BAT CHGR	CHG		N/A	1	Included as part of Diesel Generator
DGSA-CPSR-2A	STRT AIR CPSR 2A	CPSR		N/A	1	Included as part of Diesel Generator
DGSA-CPSR-2B	STRT AIR CPSR 2B	CPSR		N/A	1	Included as part of Diesel Generator
DGSA-D-SAC2A	STRT AIR CPSR 2A D ENG	ENG		N/A	1	Included as part of Diesel Generator
DG-TGR-DG2	DG 2 TGR	TURB		N/A	1	Included as part of Diesel Generator
DG-VRG-DG2	DG2 VRG	VRG	4160V	15	1	HEAF
DG-VRG-DG2	DG2 VRG	VRG	4160V	16b	1	HEAF
DG-XFMR-DG2 GND	DG2 NEUT GRD XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
DG-XFMR-DG2 MVC	DG2 MAN V CONTR	XFMR	0.63 kVA	N/A	1	Less than 45 kVA
DG-XFMR-DG2 VARM	DG2 LOC VARMETER PH SHIFT XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
DG-XFMR-WT7	DG2 WT	XFMR	<45 kVA	N/A	1	Less than 45 kVA
EE-MCC-DG2	MCC-DG2	MCC		15	4	
EE-PNL-DG2	125VDC PNL DG2	PNL	125 VDC	15	1	PRA Component - Non-ventilated
EE-PNL-LPDG2	LP LPDG2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-SWGR-4160DG2	4160 V SWGR DG2	SWGR	4160V	15	2	HEAF
EE-SWGR-4160DG2	4160 V SWGR DG2	SWGR	4160V	16b	2	HEAF
EE-XFMR-LPDG2	XFMR F/ LP LPDG2	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-MCCDG2	3PH 4160-480Y/277 VAC PWR XFMR	XFMR	250 kV	23b	1	
FDN-P-DG2	SUMP P DG-2	PMP	3 hp	N/A	1	Less than 5 horsepower
HV-FAN- EF-DG-1B	EXH FAN F/ D GEN RM 2	FAN	30 hp	26	1	

FIRE ZONE: 14B		FIRE COMPARTMENT: DG-B				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- HV-DG-1B	DG UNIT 2 VENT UNIT	FCU	5 hp	26	1	
HV-FCU- HV-DG-1D	DG UNIT 2 VENT UNIT	FCU	20 hp	26	1	
HV-P- CTP-DG-1B	HV-DG-1B CT CIRC P	PMP		21	1	
LRP-PNL- LCP-HV-DG-1B	DG BLDG HV LOC CONTR PNL HV-DG-1B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- LCP-HV-DG-2B	DG HV LOC CONTR PNL LCP-HV-DG-2B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-DG-B	DG BLDG HV UNIT LIR	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK- LIR-HV-DG-D	DG BLDG HV UNIT LP-1-DG-1D LIR	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR107B	DO SYS LOC PNL 107B	PNL		15	1	Non-ventilated - Not Secured

FIRE ZONE: 14C		FIRE COMPARTMENT: DG-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
DGDO-TK-DOD1	DO DAY TK 1	TNK		N/A	1	

FIRE ZONE: 14D		FIRE COMPARTMENT: DG-B				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
DGDO-TK-DOD2	DO DAY TK 2	TNK		N/A	1	

FIRE ZONE: 15		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
AC-AG-1C	ASB C CHEM ADDITION TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
AC-AG-1D	ASB D CHEM ADDITION TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
ACD-P- CP-BR-A1	AUX COND P A1	PMP	5 hp	21	1	
ACD-P- CP-BR-A2	AUX COND P A2	PMP	5 hp	21	1	
ACD-P-BTP1A	BOILER BLOWDOWN TRANSFER PUMP 1A	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
ACD-P-BTP1B	BOILER BLOWDOWN TRANSFER PUMP 1B	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
ACD-XFMR-BBT	BLR BD XFER CONTR PWR XFMR	XFMR	0.15 kVA	N/A	1	Less than 45 kVA
AC-P-CC	BLR C CIRC P	PMP	15 hp	21	1	
AC-P-CD	BLR D CIRC P	PMP	15 hp	21	1	
AC-P-CFA	CHEM ADDITION P 1A	PMP	1/4 hp	N/A	1	Less than 5 horsepower
AC-P-CFB	CHEM ADDITION P 1B	PMP	1/2 hp	N/A	1	Less than 5 horsepower
AC-P-CFC	ELECTROLYTE P TO BLR 1C	PMP	1/3 hp	N/A	1	Less than 5 horsepower
AC-P-CFD	ELECTROLYTE P TO BLR 1D	PMP	1/3 hp	N/A	1	Less than 5 horsepower
AC-P-CFE	CHEM ADDITION P 1E	PMP	1/2 hp	N/A	1	Less than 5 horsepower
AC-P-FWA	BF P A	PMP	40 hp	21	1	
AC-P-FWB	BF P B	PMP	40 hp	21	1	
ASB-B-1C	ASB C	BOILER		30	1	
ASB-B-1D	ASB D	BOILER		30	1	
ASB-HTR-1C	ASB C STANDBY HTR	HTR	40 hp	26	1	
ASB-HTR-1D	ASB D STANDBY HTR	HTR	40 hp	26	1	
ASB-XFMR-C	ASB C 24 VDC SUPPLY PWR XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
ASB-XFMR-D	ASB D 24 VDC SUPPLY PWR XFMR	XFMR	<45 kVA	N/A	1	Less than 45 kVA
EE-PNL-ASB1	PP ASB1	PNL		15	1	Non-ventilated - Not Secured
EE-STR- FWP-BR-A	STR F/ HTG BF P FWP-BR-A	PNL	480 VAC	15	1	Non-ventilated
EE-STR- FWP-BR-B	STR F/ HTG BF P FWP-BR-B	PNL	480 VAC	15	1	Non-ventilated
EE-STR- P-BR-A	STR F/ HTG BLR FO P P-BR-A	PNL	480 VAC	15	1	Non-ventilated
EE-STR- P-BR-B	STR F/ HTG BLR FO P P-BR-B	PNL	480 VAC	15	1	Non-ventilated
EE-XFMR-ASB1	XFMR F/ PP ASB1	XFMR	30 kVA	N/A	1	Less than 45 kVA
FP-PNL-DG	DG RM FIRE ALM CNTL PNL	PNL	120 VAC	15	1	Non-ventilated - Not Secured
HV-MOT- UH-BR-1A	BLR RM UNIT HTR MOT	MOT	1/2 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-BR-1B	BLR RM UNIT HTR MOT	MOT	1/2 hp	N/A	1	Less than 5 horsepower
LRP-PNL-BBT	BLR BD XFER CONTR PNL	PNL	480 VAC	15	1	Non-ventilated
TEC-P-BP	FDEM-A BOOSTER P 903'	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 15		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
TEC-P-DA	TEC DEAERATOR VACUUM PUMP	PMP	1 hp	N/A	1	Less than 5 horsepower
TEC-PNL-DA	TEC DEAERATOR SKID LOCAL CNTL PANEL	PNL		15	1	Non-ventilated - Robustly Secured
TEC-STR-DEM	STR F/ TEC BOOSTER P MOT TEC-MOT-BP	PNL	600 VAC	15	1	Non-ventilated

FIRE ZONE: 16		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LRP-RACK- LIR-HV-TG-EF	TG BLDG EXH FAN LOC INSTR RACK HV-TG-EF	PNL	Instrument Rack	N/A	1	Not considered ignition source
EE-STR- EF-T-1A	MAG STR F/ EXH FAN EF-T-1A	PNL	460 VAC	15	1	Non-ventilated
EE-STR- EF-T-1B	MAG STR F/ EXH FAN EF-T-1B	PNL	460 VAC	15	1	Non-ventilated
EE-STR- EF-T-1C	MAG STR F/ EXH FAN EF-T-1C	PNL	460 VAC	15	1	Non-ventilated
EE-STR- EF-T-1D	MAG STR F/ EXH FAN EF-T-1D	PNL	460 VAC	15	1	Non-ventilated
HV-AC- CPU-20A	TB NORMAL RANGE KAMAN ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- CPU-20B	TB HIGH RANGE KAMAN ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- EF-T-1A	TB EXH FAN	FAN	75 hp	26	1	
HV-FAN- EF-T-1B	TB EXH FAN	FAN	75 hp	26	1	
HV-FAN- EF-T-1C	TB EXH FAN	FAN	75 hp	26	1	
HV-FAN- EF-T-1D	TB EXH FAN	FAN	75 hp	26	1	
RMV-P-20	TB VENT NMC SAMPLE P	PMP	<5 hp	N/A	1	Less than 5 horsepower
RMV-P-20A	TB NORM RANGE SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMV-P-20B	TB HI RANGE SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMV-P-20C	TB AUX P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMV-RM-5	TB EXHAUST SAMPLER	PNL	115 VAC - Ventilated	15	1	

FIRE ZONE: 17		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H1	WT ELEC HST H1 (BLDG-HST-H1)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
DW-P-A	DW XFER P A	PMP	40 hp	21	1	
DW-P-B	DW XFER P B	PMP	40 hp	21	1	
EE-MCC-E	MCC-E	MCC		15	8	
EE-PNL-LPTG13	LP LPTG13	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPTG1	PP PPTG1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPWT1	PP FOR BRE #6	PNL	480-208/120 VAC Ventilated	15	1	
EE-XFMR-LPTG13	XFMR F/ LP LPTG13	XFMR	45 kVA	23b	1	
EE-XFMR-PPTG1	XFMR F/ PP PPTG1	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-MOT- UH-WT-1A	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1B	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1C	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1D	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1E	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1F	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-WT-1G	WT AREA UNIT HTR MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
PW-P-A	PW P A	PMP	10 hp	21	1	
PW-P-B	PW P B	PMP	10 hp	21	1	
WT-HTR-NS	NEUT SKID HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
WT-XFMR-NSDP	NEUT SKID XFMR & DISTR PNL	XFMR	15 kVA	N/A	1	Less than 45 kVA
	XFMR FOR MCC-E ON ELEVATION 923'-0"	XFMR	15 kVA	N/A	1	Less than 45 kVA

FIRE ZONE: 18A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C3	MACH SHOP CRN C3 (BLDG-HST-C3)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H3	MACH SHOP ELEC HST H3 (BLDG-HST-H3)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-MCC-MSA	SWBD MSA	PNL	480 VAC	15	1	Non-ventilated - HEAF
EE-MCC-MSA	SWBD MSA	PNL	480 VAC	16a	1	HEAF
EE-MCC-MSB	SWBD MSB	PNL	480 VAC	15	1	Non-ventilated - HEAF
EE-MCC-MSB	SWBD MSB	PNL	480 VAC	16a	1	HEAF
EE-PNL-LOPSB	LP LOPS-B	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-LPTG14	LP LPTG14	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG15	LP LPTG15	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG16	LP LPTG16	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG17	LP LPTG17	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTG18	LP	PNL	120/240 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPMS	PP PPMS	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPTG16	PP PPTG16	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STRR-CCL	MACH SHOP RACK CCL	PNL		15	1	Non-ventilated - Robustly Secured
EE-STRR-MSC	MACH SHOP RACK MSC	PNL		15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPTG14	XFMR F/ LTG PNL LPTG14 & LPTG15	XFMR	75 kVA	23b	1	
EE-XFMR-LPTG18	XFMR F/ EE-PNL-LPTG18	XFMR	25 kVA	N/A	1	Less than 45 kVA
EE-XFMR-PPMS	XFMR F/ PNL PPMS	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-PPTG16	XFMR F/ PP PPTG16	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-PPTG16	XFMR FOR POWER PNL PPTG16	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-AC- AC-CCL-1A	AIR COND UNIT F/ MAINT LUNCH RM	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- AC-CCL-1A	COLD CHEMISTRY LAB ACU SF	FAN		26	1	
HV-FAN- EF-MS-1C	OIL STORAGE RM EXH FAN	FAN		26	1	
HV-FAN- EF-MS-1D	PAINT STORAGE RM EXH FAN	FAN		26	1	
HV-FAN- EF-MS-1E	TOILET & LOCKER RM EXH FAN	FAN		26	1	
HV-FAN- EF-MS-1F	GRIT BLAST BOOTH EXH & DUST COLL	FAN		26	1	
HV-FAN- EF-MS-1G	GRINDING COMBINED EXH & DUST COLL	FAN		26	1	
HV-FAN- EF-MS-1J	TOOL CRIB EXH FAN	FAN		26	1	
HV-HTR-MSWELD	WELD SHOP ELECTRIC UNIT HEATER	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-M-1A	MACH SHOP UNIT HTR UH-M-1A	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-M-1B	MACH SHOP UNIT HTR UH-M-1B MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-M-1C	MACH SHOP UNIT HTR UH-M-1C MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 18A		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-MOT- UH-M-1D	MACH SHOP UNIT HTR UH-M-1D MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-M-1E	MACH SHOP PAINT RM UNIT HTR UH-M-1E MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
LRP-PNL- LCP-HV-MS	MACH SHOP HV LOC CONTR PNL HV-MS	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-MS-A	MACH SHOP HV UNIT 1-HV-MS-1A LIR	PNL	Instrument Rack	N/A	1	Not considered ignition source
PW-HTR-MS2	MACHINE SHOP WATER HEATER	HTR	<5 hp	N/A	1	Less than 5 horsepower
	CLOTHES DRYER	CLOTH DRY		13	1	

FIRE ZONE: 18B		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-MOT- UH-M-1F	MACH SHOP TOOL RM UNIT HTR UH-M-1F MOT	MOT	1/5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 18C		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: 18D		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-XFMR-CCL	XFMR F/ COLD CHEM LAB RACK CCL	XFMR	3 kVA	N/A	1	Less than 45 kVA

FIRE ZONE: 18E		FIRE COMPARTMENT: TB-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: 19A		FIRE COMPARTMENT: OB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CP-RW-1A	PUMP MOTOR	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
CP-RW-1B	PUMP MOTOR	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 19B		FIRE COMPARTMENT: OB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-LBCRP1	LO BACKGROUND COUNTING RM PNL LBCRP1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB1	LP	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB2	LP LPOB2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB2A	LP LPOB2A	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB2B	LP LPOB2B	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB3A	LP LPOB3A	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPOB3B	LP LPOB3B	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPTSC	LP LPTSC	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPOB2	XFMR F/ PNL LPOB2 & LBCRP1	XFMR	45 kVA	23b	1	
EE-XFMR-LTOB1	XFMR F/ LP LPOB1	XFMR	45 kVA	23b	1	
EE-XFMR-LTOB2	XFMR F/ PNL LPOB2A & LPOB2B	XFMR	75 kVA	23b	1	
EE-XFMR-LTOB3	XFMR F/ PNL LPOB3A & LPOB3B	XFMR	112.5 kVA	23b	1	
EE-XFMR-LTTSC	XFMR F/ LP LPTSC	XFMR	45 kVA	23b	1	
HV-FAN- AC-LBCR-1	LO BACKGROUND COUNTING RM ACU SF	FAN		26	1	
HV-FAN- EF-3	TSC TOILET EXH FAN EF-3	FAN		26	1	
HV-FAN- EF-4	TSC TOILET EXH FAN EF-4	FAN		26	1	
HV-FAN- EF-5	TSC CONF RM EXH FAN EF-5	FAN		26	1	
HV-FCU- AC-LBCR-1	LO BACKGROUND COUNTING RM ACU	FCU		26	1	
HV-FCU- AHU-2	TSC AH UNIT, AHU-2	FCU		26	1	
HV-FCU- HV-FO-32	OFFICE BLDG FAN PWR UNIT VF-4E	FCU		26	1	
HV-FCU- HV-OF-1	OFFICE BLDG F PWR UNIT VF-3A	FCU		26	1	
HV-FCU- HV-OF-10	OFFICE BLDG F PWR UNIT VF-2B	FCU		26	1	
HV-FCU- HV-OF-11	TSC BYPASS UNIT BP-1A	FCU		26	1	
HV-FCU- HV-OF-12	TSC BYPASS UNIT BP-1B	FCU		26	1	
HV-FCU- HV-OF-13	OFFICE BLDG F PWR UNIT VF-4A	FCU		26	1	
HV-FCU- HV-OF-14	OF BLDG ONE DUCT THROTTLING UNIT VB-3B	FCU		26	1	
HV-FCU- HV-OF-15	OF BLDG ONE DUCT THROTTLING UNIT VB-4B	FCU		26	1	
HV-FCU- HV-OF-16	OFFICE BLDG F PWR UNIT VF-2C	FCU		26	1	
HV-FCU- HV-OF-17	OF BLDG ONE DUCT THROTTLING UNIT VB-5B	FCU		26	1	
HV-FCU- HV-OF-18	OF BLDG ONE DUCT THROTTLING UNIT VB-4C	FCU		26	1	
HV-FCU- HV-OF-19	OFFICE BLDG F PWR UNIT VF-4B	FCU		26	1	

FIRE ZONE: 19B		FIRE COMPARTMENT: OB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- HV-OF-2	OF BLDG ONE DUCT THROTTLING UNIT VB-2A	FCU		26	1	
HV-FCU- HV-OF-20	OFFICE BLDG FAN PWR UNIT VF-4C	FCU		26	1	
HV-FCU- HV-OF-21	OFFICE BLDG FAN PWR UNIT VF-1B	FCU		26	1	
HV-FCU- HV-OF-22	OF BLDG ONE DUCT THROTTLING UNIT VB-2C	FCU		26	1	
HV-FCU- HV-OF-23	OF BLDG ONE DUCT THROTTLING UNIT VB-3C	FCU		26	1	
HV-FCU- HV-OF-24	OFFICE BLDG FAN PWR UNIT VF-2D	FCU		26	1	
HV-FCU- HV-OF-25	OFFICE BLDG FAN PWR UNIT VF-1D	FCU		26	1	
HV-FCU- HV-OF-26	OFFICE BLDG FAN PWR UNIT VF-3B	FCU		26	1	
HV-FCU- HV-OF-27	OF BLDG ONE DUCT THROTTLING UNIT VB-1B	FCU		26	1	
HV-FCU- HV-OF-28	OF BLDG ONE DUCT THROTTLING UNIT VB-4D	FCU		26	1	
HV-FCU- HV-OF-29	OFFICE BLDG FAN PWR UNIT VF-4F	FCU		26	1	
HV-FCU- HV-OF-3	OF BLDG ONE DUCT THROTTLING UNIT VB-3A	FCU		26	1	
HV-FCU- HV-OF-30	OFFICE BLDG FAN PWR UNIT VF-3C	FCU		26	1	
HV-FCU- HV-OF-31	OFFICE BLDG FAN PWR UNIT VF-2I	FCU		26	1	
HV-FCU- HV-OF-32	OFFICE BLDG FAN PWR UNIT VF-4E	FCU		26	1	
HV-FCU- HV-OF-33	OFFICE BLDG FAN PWR UNIT VF-4D	FCU		26	1	
HV-FCU- HV-OF-34	OFFICE BLDG FAN PWR UNIT VF-2E	FCU		26	1	
HV-FCU- HV-OF-35	OFFICE BLDG FAN PWR UNIT VF-2F	FCU		26	1	
HV-FCU- HV-OF-36	OFFICE BLDG FAN PWR UNIT	FCU		26	1	
HV-FCU- HV-OF-37	OFFICE BLDG FAN PWR UNIT VF-1F	FCU		26	1	
HV-FCU- HV-OF-38	OF BLDG ONE DUCT THROTTLING UNIT VB-3D	FCU		26	1	
HV-FCU- HV-OF-39	OFFICE BLDG FAN PWR UNIT VF-1E	FCU		26	1	
HV-FCU- HV-OF-4	OFFICE BLDG F PWR UNIT VF-1A	FCU		26	1	
HV-FCU- HV-OF-40	OF BLDG ONE DUCT THROTTLING UNIT VB-1C	FCU		26	1	
HV-FCU- HV-OF-41	OFFICE BLDG FAN PWR UNIT VF-2H	FCU		26	1	
HV-FCU- HV-OF-42	OFFICE BLDG FAN PWR UNIT VF-26	FCU		26	1	
HV-FCU- HV-OF-5	OF BLDG ONE DUCT THROTTLING UNIT VB-4A	FCU		26	1	
HV-FCU- HV-OF-6	OF BLDG ONE DUCT THROTTLING UNIT VB-1A	FCU		26	1	
HV-FCU- HV-OF-7	OF BLDG ONE DUCT THROTTLING UNIT VB-5A	FCU		26	1	

FIRE ZONE: 19B		FIRE COMPARTMENT: OB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FCU- HV-OF-8	OF BLDG ONE DUCT THROTTLING UNIT VB-2B	FCU		26	1	
HV-FCU- HV-OF-9	OFFICE BLDG F PWR UNIT VF-2A	FCU		26	1	
HV-HTR- CUH-OF-1	OFFICE BLDG 903' CABINET UH CUH-1	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- CUH-OF-2	OFFICE BLDG 903' CABINET UH CUH-2	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-1	ELEC DUCT HTR F/ AHU-1	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-2	TSC AHU-W ELEC HEAT COIL	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-3	ELEC DUCT HTR F/ AHU-2	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-4	OFFICE BLDG AHU-1 ELEC HEAT COIL	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-1	OFFICE BLDG PENTHOUSE EUH, UH-1	HTR	<5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 19C		FIRE COMPARTMENT: OB				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-MCC-OB	MCC MCC-OB	MCC		15	3	
EE-MCC-TSC	MCC-TSC	MCC		15	1	
EE-PNL-LPOBP	LP LPOBP	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-OBFP	OFFICE BLDG MN BRKR	PNL	480 VAC	15	1	
EE-PNL-OBSM	OFFICE BLDG SWBD OBSM	PNL	480 VAC	15	2	
EE-XFMR-LTOBP	XFMR F/ LP LPOBP	XFMR	9 kVA	N/A	1	Less than 45 kVA
HV-CH- CH-1	OFFICE BLDG CH CH-1	CHLR	7-1/2 hp	26	1	
HV-CH- CH-2	OFFICE BLDG CH CH-2	CHLR	7-1/2 hp	26	1	
HV-CPSR-OF	HV PNEU CONTR AIR CPSR	CPSR		9	1	
HV-FAN- OAF-1	TSC SF OAF-1	FAN	3/4 hp	N/A	1	Less than 5 horsepower
HV-FAN- OAF-2	TSC EMERG SF OAF-2	FAN	3/4 hp	N/A	1	Less than 5 horsepower
HV-FCU- AHU-1	OFFICE BLDG AH UNIT, AHU-1	FCU	40 hp	26	1	
HV-P- CWP-1	OFFICE BLDG CHILLED WTR CIRC P CWP-1	PMP	7-1/2 hp	21	1	
HV-P- CWP-2	OFFICE BLDG CHILLED WTR CIRC P CWP-2	PMP	7-1/2 hp	21	1	
HV-P- CWP-3	OFFICE BLDG CHILLED WTR CIRC P CWP-3	PMP	3 hp	N/A	1	Less than 5 horsepower
HV-P- CWP-4	OFFICE BLDG CHILLED WTR CIRC P CWP-4	PMP	3 hp	N/A	1	Less than 5 horsepower
HV-P- CWP-5	OFFICE BLDG CHILLED WTR CIRC P CWP-5	PMP	3 hp	N/A	1	Less than 5 horsepower
HV-P- CWP-6	OFFICE BLDG CHILLED WTR CIRC P CWP-6	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 20A		FIRE COMPARTMENT: IS-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACD-P- CP-IS-A1	COND DUPLEX PUMP A1	PMP	3/4 hp	N/A	1	Less than 5 horsepower
ACD-P- CP-IS-A2	COND DUPLEX PUMP A2	PMP	3/4 hp	N/A	1	Less than 5 horsepower
EE-PNL-DPISA	DISTR PNL DPIS-A	PNL	120/240 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-DPISB	DISTR PNL DPIS-B	PNL	120/240 VAC	15	1	Non-ventilated - Robustly Secured
EE-STR-LZ 2128MV	STR F/ SW-2128MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-STRR-LZ	INTK STRR LZ	PNL		15	1	PRA Component - Non-ventilated
EE-STRR-TZ	INTK STRR TZ	PNL		15	1	PRA Component - Non-ventilated
EE-STR-S191	SWP A & C STNR S191 CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
EE-STR-S192	SWP B & D STNR S192 CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
EE-STR-TZ 2129MV	STR F/ SW-2129MV	PNL	480 VAC	15	1	PRA Component - Non-ventilated
EE-XFMR-DPISA	XFMR F/ PNL DPIS-A	XFMR	3 kVA	N/A	1	Less than 45 kVA
EE-XFMR-DPISB	XFMR F/ PNL DPIS-B	XFMR	3 kVA	N/A	1	Less than 45 kVA
FP-P-C	FP P C	PMP	250 hp	21	1	
FP-PNL-C	SYLVANIA C PNL F/ FP P C	PNL	480 VAC	15	1	Non-ventilated
HV-FCU- HV-IS-1A	INTK SWP RM HV UNIT	FCU		26	1	
HV-FCU- HV-IS-1B	INTK SWP RM HV UNIT	FCU		26	1	
LRP-PNL-S191	SW P A & C STNR S191 CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
LRP-PNL-S192	SW P B&D STNR S192 CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
LRP-PNL-SWGPA	SW GLAND WTR SUPPLY CONTR PNL A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-SWGPB	SW GLAND WTR SUPPLY CONTR PNL B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-SWPR	E BAY SONAR PANEL	PNL		15	1	Non-ventilated - Not Secured
SW-P-A	SWP A	PMP		N/A	1	Pump Removed
SW-P-B	SWP B	PMP		21	1	
SW-P-C	SWP C	PMP		21	1	
SW-P-D	SWP D	PMP		21	1	

FIRE ZONE: 20B		FIRE COMPARTMENT: IS-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
ACD-P- CP-IS-B1	COND DUPLEX PUMP B1	PMP	3/4 hp	N/A	1	Less than 5 horsepower
ACD-P- CP-IS-B2	COND DUPLEX PUMP B2	PMP	3/4 hp	N/A	1	Less than 5 horsepower
ANN-AC-Q	ANN MUX CABINET Q AC	AC	115V	N/A	1	Not considered ignition source
ANN-MUX-Q	ANN MUX CABINET Q	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
BLDG-HST-H15	INTK OUTSIDE HST H15 (BLDG-HST-H15)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-IS	35/5 TN WHITING INTK CRN BLDG-HST-IS	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-MOT-E1	E BAY SONAR MOTOR	MOT	<5 hp	N/A	1	Less than 5 horsepower
BLDG-P- RAKE-HYD	TRASH RAKE HYD PUMP	PMP	2 hp	N/A	1	Less than 5 horsepower
BLDG-PNL- RAKE-CNTRL	TRASH RAKE CONTROL PANEL	PNL	460 VAC	15	1	Non-ventilated
BLDG-PNL- RAKE-DISCONNECT	TRASH RAKE MAIN DISCONNECT PANEL	PNL	460 VAC	15	1	Non-ventilated
CW-HTR-SCNPABM	SCRN WSH P A&B DISCH STNR CBX STRIP HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
CW-P-A	CIRC WTR P A	PMP	1750 hp - 53 gal oil	21	1	
CW-P-B	CIRC WTR P B	PMP	1750 hp - 53 gal oil	21	1	
CW-P-C	CIRC WTR P C	PMP	1750 hp - 53 gal oil	21	1	
CW-P-D	CIRC WTR P D	PMP	1750 hp - 53 gal oil	21	1	
CW-PNL-A1	TRAVEL SCREEN A1 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-A2	TRAVEL SCREEN A2 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-B1	TRAVEL SCREEN B1 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-B2	TRAVEL SCREEN B2 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-C1	TRAVEL SCREEN C1 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-C2	TRAVEL SCREEN C2 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-D1	TRAVEL SCREEN D1 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-D2	TRAVEL SCREEN D2 CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-PNL-E	TRAVEL SCREEN E CONTROL PANEL	PNL	480 VAC	15	1	Non-ventilated
CW-P-SCNPA	SCRN WSH P A	PMP	250 hp	21	1	
CW-P-SCNPB	SCRN WSH P B	PMP	250 hp	21	1	
CW-P-SCNPC	SCRN WSH P C	PMP	350 hp	21	1	
CW-P-SCNPD	SCRN WSH P D	PMP	350 hp	21	1	
CW-SCN-A1	A1 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-A2	A2 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-B1	B1 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-B2	B2 TRAVELING WATER SCREEN	MOT	5 hp	14	1	

FIRE ZONE: 20B		FIRE COMPARTMENT: IS-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CW-SCN-C1	C1 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-C2	C2 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-D1	D1 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-D2	D2 TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-SCN-E	E TRAVELING WATER SCREEN	MOT	5 hp	14	1	
CW-XFMR- SCN-A1	CONTR PWR XFMR F/ TRAVELING SCRN A1	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-A2	CONTR PWR XFMR F/ TRAVELING SCRN A2	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-B1	CONTR PWR XFMR F/ TRAVELING SCRN B1	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-B2	CONTR PWR XFMR F/ TRAVELING SCRN B2	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-C1	CONTR PWR XFMR F/ TRAVELING SCRN C1	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-C2	CONTR PWR XFMR F/ TRAVELING SCRN C2	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-D1	CONTR PWR XFMR F/ TRAVELING SCRN D1	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-D2	CONTR PWR XFMR F/ TRAVELING SCRN D2	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR- SCN-E	CONTR PWR XFMR F/ TRAVELING SCRN E	XFMR	250 VA	N/A	1	Less than 45 kVA
CW-XFMR-SCNP	SCRN WSH P A B C & D CONTR PWR XFMR	XFMR	2 kVA	N/A	1	Less than 45 kVA
CW-XFMR-SCNPABM	SCRN WSH P A/B DISCH STNR CONTR PWR XFMR	XFMR	750 VA	N/A	1	Less than 45 kVA
EE-MCC-Z	MCC-Z	MCC		15	7	
EE-PNL-AA5	125VDC PNL AA5	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPIS1	LP LPIS1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPIS2	SCRN BAY AREA LP LPIS2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-SPIS1	SPACE HTR PNL SPIS1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-STRR-ZA	INTK STRR ZA	PNL		15	1	Non-ventilated - Robustly Secured
EE-STR-S181A	SCRN WSH STNR S-181A CONTR PNL	PNL	460 VAC	15	1	Non-ventilated
EE-SWGR-480E	480V SWGR 1E	SWGR	480V	15	3	HEAF
EE-SWGR-480E	480V SWGR 1E	SWGR	480V	16a	3	HEAF
EE-XFMR-480E	480VAC SWGR XFMR E	XFMR	750 kVA	23b	1	
EE-XFMR-LPIS1	XFMR F/ LPIS1 & SPIS1	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPIS2	XFMR F/ LP LPIS2	XFMR	15 kVA	N/A	1	Less than 45 kVA
HV-MOT- UH-IS-1A	INTK UNIT HTR UH-IS-1A MOT	MOT	1/30 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 20B		FIRE COMPARTMENT: IS-A				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-MOT- UH-IS-1B	INTK UNIT HTR UH-IS-1B MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-IS-1C	INTK UNIT HTR UH-IS-1C MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-IS-1D	INTK UNIT HTR UH-IS-1D MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-IS-1E	INTK UNIT HTR UH-IS-1E MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-IS-1F	INTK UNIT HTR UH-IS-1F MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower
HV-MOT- UH-IS-1G	INTK UNIT HTR UH-IS-1B MOT	MOT	1/4 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 21A		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
CF-BLWR-BW	COND FDEM BACKWASH AIR BLWR	BLWR	100 hp	14	1	
CF-P-BW	COND FDEM BACKWASH P	PMP	60 hp	21	1	
CM-P-REC	COND RECIRC P	PMP	75 hp	21	1	
CM-P-RW	RW BLDG AUX COND BOOSTER P	PMP	60 hp	21	1	
EE-MCC-P	MCC-P	MCC		15	13	
EE-PNL-LPRW1	LP LPRW1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPSW1	XFMR F/ PNL LPSW-1	XFMR	7 kVA	N/A	1	Less than 45 kVA
LRP-PNL- 25-13	RW PNL 25-13	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-31	COND BACKWASH RCV TK RACK 25-31	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-65	WASTE SLUDGE SPENT RESIN TK RACK 25-65	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR114	RW LAB DR SV RACK 114	RACK		15	1	Non-ventilated - Robustly Secured
RW-AG-LDTA1A	LAB DR TK 1A AG	MOT	< 5 hp	N/A	1	Less than 5 horsepower
RW-AG-LDTA1B	LAB DR TK 1B AG	MOT	< 5 hp	N/A	1	Less than 5 horsepower
RW-AG-WASHCTA	WASHDOWN COLL TK MX	MOT	< 5 hp	N/A	1	Less than 5 horsepower
RW-P-CBTP	COND BACKWASH XFER P	PMP	7-1/2 hp	21	1	
RW-P-CPSDP	COND PH SEP DECANT P	PMP	15 hp	21	1	
RW-P-CPSSP	COND PH SEP SLUDGE P	PMP	25 hp	21	1	
RW-P-CWP	CHEM WASTE P	PMP	5 hp	21	1	
RW-P-FDCP	FL DR COLL P	PMP	7-1/2 hp	21	1	
RW-P-FDSP	FL DR SAMPLE P	PMP	7-1/2 hp	21	1	
RW-P-H1	RW BLDG FL DR SUMP P H1	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-H2	RW BLDG FL DR SUMP P H2	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-J1	RW BLDG EQUIP DR SUMP P J1	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-J2	RW BLDG EQUIP DR SUMP P J2	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-K1	RW BLDG FL DR SUMP P K1	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-K2	RW BLDG FL DR SUMP P K2	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-LDP	LAB DR P	PMP	7-1/2 hp	21	1	
RW-P-LUDP1A	LAUNDRY DR P 1A	PMP	7-1/2 hp	21	1	
RW-P-LUDP1B	LAUNDRY DR P 1B	PMP	7-1/2 hp	21	1	
RW-P-SRP	SPENT RESIN P	PMP	5 hp	21	1	
RW-P-TST	RW COLL SL TRFR P	PMP	40 hp	21	1	
RW-P-WASHCTP	WASHDOWN COLL TK P	PMP	5 hp	21	1	
RW-P-WCP	WASTE COLL P	PMP	40 hp	21	1	

FIRE ZONE: 21A		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RW-P-WSLP	WASTE SLUDGE P	PMP	40 hp	21	1	
RW-P-WSP1A	WASTE SAMPLE P 1A	PMP	30 hp	21	1	
RW-P-WSP1B	WASTE SAMPLE P 1B	PMP	30 hp	21	1	
RW-P-WSRP	WASTE SURGE P	PMP	40 hp	21	1	

FIRE ZONE: 21B		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-H19	RW DECON RM HST H19 BLDG-HST-H19	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
CC-1	CONTROL CABINET CC-1	PNL	480V	15	1	HEAF
CC-1	CONTROL CABINET CC-1	PNL	480V	16a	1	HEAF
CF-AG-PT	PRECOAT TK AG	MOT	1/2 hp	N/A	1	Less than 5 horsepower
CF-P-HA	COND FDEM HOLDING P A	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HB	COND FDEM HOLDING P B	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HC	COND FDEM HOLDING P C	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HD	COND FDEM HOLDING P D	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HE	COND FDEM HOLDING P E	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HF	COND FDEM HOLDING P F	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-HG	COND FDEM HOLDING P G	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-P	COND FDEM PRECOAT P	PMP	30 hp	21	1	
EE-MCC-RX	MCC-RX	MCC		15	3	
EE-PNL-CF	COND FDEM CONTR PWR DIST PNL	PNL	Ventilated	15	8	
EE-PNL-CPP3	CRIT INST & CPP CPP3	PNL	120/240 VAC	15	1	Non-ventilated - Not Secured
EE-PNL-LPRW2	LP LPRW2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPRW2A	LP LPRW2A	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR- CPU-354	KAMAN MICROCOMPUTER 120VAC PWR COND	XFMR	1 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPRW1	XFMR F/ LP LPRW1	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPRW2	XFMR F/ LP LPRW2 & LPRW2A	XFMR	0.030 kVA	N/A	1	Less than 45 kVA
FPC-P-FDHA	FPC FDEM HOLDING P A	PMP	5 hp	21	1	
FPC-P-FDHB	FPC FDEM HOLDING P B	PMP	5 hp	21	1	
HV-AC- CPU-354	LIQUID RADWASTE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-FAN- HF-RW-1D	DF RM HOOD FAN	FAN	< 5 hp	N/A	1	Less than 5 horsepower
HV-FCU- AC-RW-1B	RW CR ACU	FCU	< 5 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 19-4-70A	FUEL POOL & CLEANUP LOC PNL 19-4-70A	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 19-4-70B	FUEL POOL FDEM PNL 19-4-70B	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 19-4-71	FUEL POOL F A & B INSTR RACK 19-4-71	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-PNL- 25-10	RW PNL 25-10	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-11	RW PNL 25-11	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-12	RW PNL 25-12	RACK		15	1	Non-ventilated - Robustly Secured
LRP-PNL- 25-17	RW PNL 25-17	PNL	Ventilated	15	8	

FIRE ZONE: 21B		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LRP-PNL- LCP-HV-RW	RW CONTR RM HV LOC CONT PNL HV-RW	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-PAS	PAS CONTR PNL	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR106A	COND DEMIN LOC INSTR RACK 106A	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR106B	COND DEMIN LOC INSTR RACK 106B	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR106C	COND DEMIN LOC INSTR RACK 106C	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR106D	COND DEMIN LOC INSTR RACK 106D	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-LR106E	COND DEMIN LOC INSTR RACK 106E	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-LR106F	COND DEMIN LOC INSTR RACK 106F	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR110	RW BLDG FUEL POOL DEMIN LOC INSTR RACK	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR113	RW DEMIN SV RACK 113	RACK		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR125A	FUEL POOL F A SOL RACK LR-125A	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR125B	FUEL POOL FDEM SV RACK 125B	RACK	Instrument Rack	N/A	1	Not considered ignition source
LRP-RACK-LR126	FUEL POOL FDEM SV CONTR PNL-126	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR127	LAB DR TK SV CONTR PNL-127	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR128	RW AUX COND & WTR DEMIN V CONT PNL 128	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR135	FL DR DEMIN SV RACK 135	RACK		15	1	Non-ventilated - Robustly Secured
PNL-20-952A	HOPPER 1A PANEL	PNL		15	1	Non-ventilated - Robustly Secured
PNL-20-952B	HOPPER 1B PANEL	PNL		15	1	Non-ventilated - Robustly Secured
PNL-953	WASTE COLLECTOR FILTER PANEL	PNL		15	1	Non-ventilated - Robustly Secured
PNL-954	FLOOR COLLECTOR FILTER PANEL	PNL		15	1	Non-ventilated - Robustly Secured
RMP-P-354	RW LIQ DISCH MONITOR SAMPLE P	PMP	2 hp	N/A	1	Less than 5 horsepower
RPM-CPU-354	LIQUID RAD WASTE MONITOR RAD MICROCOMPUTER PANEL	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
RW-AG-RFTA	RESIN FD TK AG	MOT	<5 hp	N/A	1	Less than 5 horsepower
RW-AG-WFATA	WASTE F AID TK AG	MOT	3/4 hp	N/A	1	Less than 5 horsepower
RW-AG-WPTA	WASTE PRECOAT TK AG	MOT	<5 hp	N/A	1	Less than 5 horsepower
RW-BLWR-RWPB	RW PRESS BLWR	BLWR	1/3 hp	N/A	1	Less than 5 horsepower
RW-MOT-WFATDE	WASTE F AID TK DUST EVAC	MOT	1/3 hp	N/A	1	Less than 5 horsepower
RW-MOT-WPTDE	WASTE PRECOAT TK DUST EVAC MOT	MOT	1/3 hp	N/A	1	Less than 5 horsepower
RW-P-FDFAP	FL DR F AID P	PMP	1/4 hp	N/A	1	Less than 5 horsepower
RW-P-FDFHP	FL DR F HOLDING P	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-RWPHP	RW PRESS HYDRAULIC P	PMP	5 hp	21	1	
RW-P-WCFHUP	WASTE COLL F HOLDUP P	PMP	5 hp	21	1	
RW-P-WFAP	WASTE F AID P	PMP	1/4 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 21B		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RW-P-WPP	WASTE PRECOAT P	PMP	15 hp	21	1	
	RADWASTE MIXER CONTROL PANEL	PNL		15	1	Non-ventilated - Not Secured

FIRE ZONE: 21C		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-MCC-W	MCC-W	MCC		15	9	
EE-PNL-LPRW3	LP LPRW3	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-RLP1	RADIOCHEM LAB PNL RLP1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPRW3	XFMR F/ LP LPRW3	XFMR	45 kVA	23b	1	
HV-AC- AC-RW-1C	RADIO CHEMISTRY LAB COUNTING RM ACU	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-AC- CPU-30A	RADWASTE NORMAL RANGE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-AC- CPU-30B	RADWASTE HIGH RANGE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-FAN- AC-RW-1C FCU	AC-RW-1C FCU	FAN		26	1	
HV-FAN- HF-RW-1A	RADIO CHEMISTRY LAB HOOD FAN	FAN	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- HF-RW-1B	RADIO CHEMISTRY LAB HOOD FAN	FAN	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- HF-RW-1C	RADIO CHEM LAB HOOD FAN	FAN	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN- HF-RW-1E	BF F/ SR-1E HOOD EXH	FAN	3/4 hp	N/A	1	Less than 5 horsepower
HV-FAN- SF-RW-1A-A	RW BLDG H & V UNIT SF	FAN		26	1	
HV-FAN- SF-RW-1A-B	RW BLDG H & V UNIT SF	FAN		26	1	
HV-FCU- AC-RW-1A	RADIOCHEM LAB ACU	FCU		26	1	
HV-FCU- AC-RW-1C	FCU F/ AC-RW-1C	FCU		26	1	
HV-FCU- HV-RW-1D	RW-918-B202 OFFICE COOL FCU	FCU		26	1	
HV-FCU- HV-RW-1F	RW-918-B209 SAMPLE RM COOL FCU	FCU		26	1	
HV-FCU- HV-RW-1G	RW-918-B202 CORR COOL FCU	FCU		26	1	
HV-P- CHP-RW-1A	CHILLED WTR P CHP-RW-1A	PMP	< 5 hp	N/A	1	Less than 5 horsepower
HV-P- RP-RW-1A	REFR P F/ CH-RW-1A	PMP	< 5 hp	N/A	1	Less than 5 horsepower
HV-P- SP-RW-1A	SOLUTION P F/ CH-RW-1A	PMP	< 5 hp	N/A	1	Less than 5 horsepower
HW-P-CHB	HW CIRC P B	PMP	1/2 hp	N/A	1	Less than 5 horsepower
HW-P-CHC	HW CIRC P C	PMP	1/3 hp	N/A	1	Less than 5 horsepower
HW-P-CHD	HW CIRC P D	PMP	1/3 hp	N/A	1	Less than 5 horsepower
LRP-RACK- LIR-HV-RW-A	RW BLDG HV UNIT 1-HV-RW-1A LIR	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-OFFICE	OFF BLDG HW HTG LOC INSTR RACK OFFICE	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-LR136	RW BLDG CONCENT WASTE MEAS SYS SOV RACK	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-SRE	RW BLDG SAMPLG RACK 1E GRAB SAMPLE STA	RACK		15	1	Non-ventilated - Not Secured
LRP-RACK-SREC	RACK F/ COND F DEM MONITORING	RACK		15	1	Non-ventilated - Not Secured

FIRE ZONE: 21C		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RMV-P-30	RW ARW BLDG VENT NMC SAMPLE P	PMP	< 5 hp	N/A	1	Less than 5 horsepower
RMV-P-30A	RW HI RANGE NORM SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMV-P-30B	RW HI RANGE HI SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 21D		FIRE COMPARTMENT: RW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C1	COND FDEM AREA CRN C1	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H16	RW CENT RM ELEC HST BLDG-HST-H16	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H17	LAUNDRY RM HST H17 BLDG-HST-H17	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-PNL-LPRW4	LP LPRW4	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPCH1	CHANGE AREA HV PP PP-CH-1	PNL	480 VAC	15	1	Non-ventilated
EE-XFMR-HMSP2	XFMR F/ HOT MACH SHOP PNL HMSP2	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPRW4	XFMR F/ LP LPRW4	XFMR	30 kVA	N/A	1	Less than 45 kVA
HV-FAN- EF-RW-1A	RW BLDG EXH FAN	FAN	75 hp	26	1	
HV-FAN- EF-RW-1B	RW BLDG EXH FAN	FAN	75 hp	26	1	
HV-FAN- EF-RW-1C	RW BLDG EXH FAN	FAN	10 hp	26	1	
HV-FAN- EF-RW-1D	RW BLDG EXH FAN	FAN	10 hp	26	1	
HV-FCU- HV-RW-RL	LAUNDRY A/C AH	FCU		26	1	
LRP-RACK- LIR-HV-RW-EFA	RW BLDG EXH FAN LOC INSTR RACK HV-RW-EFA	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-RW-EFB	RW BLDG EXH FAN LOC INSTR RACK HV-RW-EFB	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-RW-EFC	RW BLDG EXH FAN LOC INSTR RACK HV-RW-EFC	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK- LIR-HV-RW-EFD	RW BLDG EXH FAN LOC INSTR RACK HV-RW-EFD	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR109	HI CONDUCTIVITY PRCS LOC INST RACK 109	RACK		15	1	Non-ventilated - Not Secured
RW-AG-AFMXTA	ANION FLOC MIXING TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
RW-AG-CFMXTA	CATION FLOC MIXING TK AG	MOT	1/4 hp	N/A	1	Less than 5 horsepower
RW-AG-RATA	RESIN ADDITION TK AG	MOT	< 5 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 22A		FIRE COMPARTMENT: ARW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
AOG-AE-SJAE1A	3RD STAGE EJECTOR 1A	MOT		14	1	
AOG-AE-SJAE1B	3RD STAGE EJECTOR 1B	MOT		14	1	
AOG-BLWR-SU1A	STARTUP BLWR 1A	BLWR	5 hp	14	1	
AOG-CPSR-FCP1A1	FREON CPSR F/ -30 DEG-F GLYCOL COOL	CPSR	50 hp	9	1	
AOG-CPSR-FCP1A2	FREON CPSR F/ +34 DEG-F GLYCOL COOL	CPSR	25 hp	9	1	
AOG-CPSR-FCP1B1	FREON CPSR F/ -30 DEG-F GLYCOL COOL	CPSR	50 hp	9	1	
AOG-CPSR-FCP1B2	FREON CPSR F/ +34 DEG-F GLYCOL COOL	CPSR	25 hp	9	1	
AOG-DRY-1A1	OG DRY BED 1A1	AIR DRY		N/A	1	Enclosed - not ignition source
AOG-DRY-1A2	OG DRY BED 1A2	AIR DRY		N/A	1	Enclosed - not ignition source
AOG-DRY-1B1	OG DRY BED 1B1	AIR DRY		N/A	1	Enclosed - not ignition source
AOG-DRY-1B2	OG DRY BED 1B2	AIR DRY		N/A	1	Enclosed - not ignition source
AOG-P-GP2A1	GLYCOL P F/ -30 DEG-F GLYCOL COOL SKID	PMP	50 hp	21	1	
AOG-P-GP2A2	GLYCOL P F/ +34 DEG-F GLYCOL COOL SKID	PMP	25 hp	21	1	
AOG-P-GP2B1	GLYCOL P F/ -30 DEG-F GLYCOL COOL SKID	PMP	50 hp	21	1	
AOG-P-GP2B2	GLYCOL P F/ +34 DEG-F GLYCOL SKID COOL	PMP	25 hp	21	1	
AOG-RCMB-1A	CATLY RCMB 1A	RECOMB		20	1	
AOG-RCMB-1B	CATLY RCMB 1B	RECOMB		20	1	
BLDG-HST-RCA	RCMB RM A HST BLDG-HST-RCA	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-RCB	RCMB RM B HST BLDG-HST-RCB	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
CF-P-DD1	COND SUMP P DD-1	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-DD2	COND SUMP P DD-2	PMP	3 hp	N/A	1	Less than 5 horsepower
CF-P-OGCBPA	COND FDEM OG COND BOOSTER P A	PMP	20 hp	21	1	
CF-P-OGCBPB	COND FDEM OG COND BOOSTER P B	PMP	20 hp	21	1	
EE-MCC-OG1	MCC-OG1	MCC		15	2	
EE-MCC-OG2	MCC-OG2	MCC		15	5	
EE-PNL-LPAR1	LP LP-AR-1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-LPAR1	XFMR F/ LP LP-AR-1	XFMR	30 kVA	N/A	1	Less than 45 kVA
LRP-PNL-GCP1	AOG -30 FREON CPSR CONTR PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-PNL-GCP2	AOG +34 FREON CPSR CONTR PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK-LR162	RCMB 1B SV LOC RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source

FIRE ZONE: 22A		FIRE COMPARTMENT: ARW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
LRP-RACK-LR163	RCMB 1A SV LOC RACK	RACK	Instrument Rack	N/A	1	Not considered ignition source
RW-AG-CWTA	CONCENTRATED WASTE TK MX	MOT	7-1/2 hp	14	1	
RW-P-AA1	ARW BLDG FL DR SUMP P AA1	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-AA2	ARW BLDG FL DR SUMP P AA2	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-BB	ARW BLDG EQUIP DR SUMP P BB	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-CC	ARW BLDG CHEM DR SUMP P CC	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RW-P-CFTP	CONCENTRATOR FD TK P	PMP	5 hp	21	1	
RW-P-CFTRP	CONCENTRATOR FD TK RECIRC P	PMP	7 1/2 hp	21	1	
RW-P-CMUPA	COND MAKEUP P A (UFSG)	PMP	7 1/2 hp	21	1	
RW-P-CMUPB	COND MAKEUP P B (UFSG)	PMP	7 1/2 hp	21	1	
RW-P-CWMTFP	CONCENTRATE WASTE MEAS TK FD P	PMP	7 1/2 hp	21	1	
RW-P-CWSTDP	CHEM WASTE SAMPLE TK DISCH P	PMP	7 1/2 hp	21	1	
RW-P-DTDP	DISTILLATE TK DISCH P	PMP	7-1/2 hp	21	1	

FIRE ZONE: 22B		FIRE COMPARTMENT: ARW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-ARW	ARW TRUCK BAY CRN (BLDG-HST-ARW)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H18	RW SHLD DOOR HST (BLDG-HST-H18)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
CM-P-CWH	CONCENTRATOR WTR HTR RECIRC P	PMP	1/6 hp	N/A	1	Less than 5 horsepower
EE-MCC-MR	MCC-MR	MCC		15	6	
EE-PNL-20-996	MAXIMUM RECYCLE PANEL	PNL	Ventilated	15	3	
EE-PNL-AOGCRP	AOG CONTR PWR DIST PNL	PNL	120 VAC - Ventilated	15	4	
EE-PNL-ARW	125VDC PNL ARW	PNL	125 VDC	15	1	Non-ventilated - Robustly Secured
EE-PNL-CPARA	CPP CP-AR-A	PNL		15	1	Non-ventilated - Not Secured
EE-PNL-LPAR2	LP LP-AR-2	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPHTAR1	HEAT TRACE PP PP-HT-AR-1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-XFMR-CPARA	XFMR F/ CPP CP-AR-A	XFMR	15 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPAR2	XFMR F/ LP LP-AR-2	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-PPHTAR1	XFMR F/ PP PP-HT-AR-1	XFMR	45 kVA	23b	1	
HV-FAN- EF-AR-1C	ARW BLDG RACK FUME HOOD EXH FAN	FAN	< 5 hp	N/A	1	Less than 5 horsepower
HV-FCU- FC-AR-1A	AOG CR FAN COIL UNIT / AIR COND	FCU		26	1	
HV-FCU- FC-AR-1B	ARW CR FAN COIL UNIT / AIR COND	FCU		26	1	
HV-HTR- EHC-AR-1A	AOG CR FCU DUCT HTR	HTR	< 5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EHC-AR-1B	ARW CR FCU DUCT HTR	HTR	< 5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-AR-1	TRUCK BAY UNIT HTR	HTR	< 5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-AR-2	TRUCK BAY UNIT HTR	HTR	< 5 hp	N/A	1	Less than 5 horsepower
LCP-HV-AR	H&V LOCAL CONTROL PANEL	PNL		15	1	Non-ventilated - Not Secured
LRP-PNL-DWS	RW DEWATER SYS CONTR PNL	PNL		15	1	Non-ventilated - Robustly Secured
LRP-RACK- LIR-HV-AR-1A	ARW BLDG AIR CONTR	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-SRG	AUG RW BLDG FLUID SAMPLG RACK 1G	RACK	Instrument Rack	N/A	1	Not considered ignition source
RW-AG-PATA	PHOSPHATE ADDITION TK MX	MOT	1/4 hp	N/A	1	Less than 5 horsepower
RWA-TRC-1	HEAT TRACE	PNL	Ventilated	15	1	
RW-MOT-DSB	DEWATER SYS BLWR MOT	MOT	30 hp	14	1	
RW-P-CRP	CONCENTRATOR RECIRC P	PMP	30 hp	21	1	
RW-P-DSDP	DEWATER SYS DEWATER P	PMP		21	1	
RW-P-DSSP	DEWATER SYS HUMD INST SAMPLE P	PMP		21	1	
RW-P-PAP	PHOSPHATE ADDITION P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
	UNFIRED STEAM GENERATOR PANEL	PNL	Ventilated	15	1	
	GA-2TMO PANEL	PNL	Ventilated	15	1	

FIRE ZONE: 22C		FIRE COMPARTMENT: ARW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
FP-PNL-FPS24	FP SYS 24 AUGMENTED RW CONTR PNL	PNL	24 VDC/120 VAC	15	1	Non-ventilated - Robustly Secured
FP-PNL-FPS25	FP SYS 25 AUGMENTED RW CONTR PNL	PNL	24 VDC/120 VAC	15	1	Non-ventilated - Robustly Secured
HV-FAN- EF-AR-1A	ARW BLDG FU-AR-1A EXH FAN	FAN		26	1	
HV-FAN- EF-AR-1B	ARW BLDG FU-AR-1B EXH FAN	FAN		26	1	
LRP-RACK- LIR-HV-AR-EF	ARW BLDG HV UNIT 1-HV-AR-EF LOC IR	RACK		15	1	Non-ventilated - Not Secured
RW-BLWR-DSB	DEWATER SYS BLWR	BLWR		14	1	

FIRE ZONE: 23A		FIRE COMPARTMENT: YD				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-MCC-FP	MCC MCC-FP	MCC		15	4	
EE-PNL-1A		PNL		15	1	Non-ventilated - Robustly Secured
EE-PNL-PPFP1		PNL	120/240 VAC	15	1	Non-ventilated - Not Secured
EE-XFMR-FP1	XFMR F/ FIRE P HOUSE PP PPFP1	XFMR	30 kVA	N/A	1	Less than 45 kVA
FP-HTR-A	FP HTR A RECIRC TO STORAGE TK A	HTR	<5 hp	N/A	1	Less than 5 horsepower
FP-P-E	FP ELEC FIRE P E	PMP	400 hp	21	1	
FP-P-F	FP JOCKEY P	PMP	15 hp	21	1	
FP-P-G	FP CIRC P G	PMP	1-3/4 hp	N/A	1	Less than 5 horsepower
FP-PNL-1	ELECTRIC FIRE PUMP E CONTROLLER	PNL	460 VAC	15	1	Non-ventilated
FP-PNL-3	FP MOT DR JOCKEY P C FP-PNL-3	PNL	460 VAC	15	1	Non-ventilated
FP-PNL-4	FP WTR SYS PRCS PNL FP-PNL-4	PNL	120 VAC	15	1	Non-ventilated - Robustly Secured
FP-PNL-5	FIRE DETECTION PNL FP-PNL-5	PNL	120 VAC	15	1	Non-ventilated - Not Secured

FIRE ZONE: 23B		FIRE COMPARTMENT: YD				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
FP-BAT-1A FP-P-D	FP D P BAT	BAT	1 cell	1	1	Includes all FP Pump D Batteries
FP-BAT-1B FP-P-D	FP D P BAT	BAT	1 cell	N/A	1	Included with FP-BAT-1A FP-P-D
FP-BAT-2A FP-P-D	FP D P BAT	BAT	1 cell	N/A	1	Included with FP-BAT-1A FP-P-D
FP-BAT-2B FP-P-D	FP D P BAT	BAT	1 cell	N/A	1	Included with FP-BAT-1A FP-P-D
FP-D-D	FP D FIRE P ENG	DG		8	1	Diesel Fire Pump
FP-GEN-FP-P-D	D ENG ALT	GEN		N/A	1	Included with FP-D-D
FP-HTR-B	FP HTR B RECIRC TO STORAGE TK B	HTR	<5 hp	N/A	1	Less than 5 horsepower
FP-P-D	FP D FIRE P D	PMP		N/A	1	Included with FP-D-D
FP-P-H	FP CIRC P H	PMP	1-3/4 hp	N/A	1	Less than 5 horsepower
FP-PNL-2	FP D P D CONTR PNL FP-PNL-2	PNL	24 VDC/120 VAC	15	1	
FP-PNL-2A	FIRE P HOUSE AUX REL PNL	PNL		15	1	Non-ventilated - Robustly Secured

FIRE ZONE: 23C		FIRE COMPARTMENT: YD				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
FP-TK-D	FIRE P FUEL STORAGE TK D DO TK	TNK		N/A	1	

FIRE ZONE: 24		FIRE COMPARTMENT: MPF				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-MPF	MPF CRN (BLDG-HST-MPF)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
EE-BAT-PMIS	PMIS UPS 125V BAT	PNL	125 VDC - Ventilated	15	1	
EE-CHG-UPS	UNINTERRUPTIBLE TO PMIS BAT CHGR	CHG		10	2	
EE-IVTR-UPS	UNINTERRUPTIBLE TO PMIS IVTR	IVTR	Ventilated	15	4	
EE-MCC-MP	MPF HVAC MCC	MCC		15	3	
EE-PNL- HV-MPF	MPF HVAC CONTR PNL	PNL		15	1	Non-ventilated - Not Secured
EE-PNL-CP1	MPF DECON RM CONTR PNL 1	PNL		15	1	Non-ventilated - Robustly Secured
EE-PNL-CP2	MPF DECON RM CONTR PNL 2	PNL		15	1	Non-ventilated - Robustly Secured
EE-PNL-LPDR	LP F/ DECON RM	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-LPMP1	MPF 480/277 LP	PNL	480/277 VAC	15	1	Non-ventilated
EE-PNL-LPMP2	LP F/ TOOL CRIB	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-MDP3	MPF HVAC EQUIP PP	PNL	480 VAC	15	1	Non-ventilated
EE-PNL-PPMP1	MPF 120/208 PP	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPMP2	MPF 480/277 PP	PNL	480/277 VAC	15	1	Non-ventilated
EE-PNL-PPMP3	MPF MACH SHOP PP	PNL	480/277 VAC	15	1	Non-ventilated
EE-PNL-PPMP4	MPF MACH SHOP PP	PNL	480/277 VAC	15	1	Non-ventilated
EE-SWBD-MDP1	MN SWBD 1 IN MPF	SWBD	277/480 V	15	3	HEAF
EE-SWBD-MDP2	MN SWBD 2 IN MPF	SWBD	277/480 V	15	3	HEAF
EE-SW-UPS1A	UPS AUTO TRANSFER SWITCH	PNL	480/277 VAC	15	1	Non-ventilated
EE-XFMR-LPDR	XFMR F/ DECON RM LTG PNL LPDR	XFMR	45 kVA	23b	1	
EE-XFMR-LPMP2	XFMR F/ TOOL CRIB LP LPMP2	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-PPMP1	30 KVA DRY TYPE XFMR	XFMR	30 kVA	N/A	1	Less than 45 kVA
EE-XFMR-RPS1A	SOLATRON ACUVOLT LINE COND	XFMR	25 kVA	23b	1	PRA Component - Less than 45 kVA
EE-XFMR-RPS1B	SOLATRON ACUVOLT LINE COND	XFMR	25 kVA	23b	1	PRA Component - Less than 45 kVA
EE-XFMR-UPS1	XFMR F/ UPS BYPASS FD TO PMIS	XFMR	75 kVA	23b	1	
FP-PNL-MPF	FIRE DETECTION PNL FP-PNL-MPF	PNL	120 VAC	15	1	Non-ventilated - Not Secured
FP-PNL-MPF CONTROL	FP SYSTEM-MPF CONTR PNL FIRECYCLE II	PNL	115 VAC	15	1	Non-ventilated - Robustly Secured
HV-FAN- MPF-EF1	MPF EXH FAN #1	FAN		26	1	
HV-FAN- MPF-EF2	MPF EXH FAN #2	FAN		26	1	
HV-FAN-AHU1	MPF AH 1	FAN		26	1	
HV-FAN-AHU2	MPF AH 2	FAN		26	1	
HV-FAN-AHU3	MPF AH 3	FAN		26	1	
HV-FAN-AHU4	MPF AH 4	FAN		26	1	

FIRE ZONE: 24		FIRE COMPARTMENT: MPF				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
HV-FAN-UPS1B	MPF BAT RM UPS EXH FAN	FAN	1/2 hp	N/A	1	Less than 5 horsepower
HV-MOT-HPF1		MOT	10 hp	14	1	
RMV-P-10A	INLET PUMP FOR MPF VENT MON SYS	PMP	1/4 hp	N/A	1	Less than 5 horsepower
RMV-P-10B	INLET PUMP FOR MPF VENT MON SYS	PMP	1/4 hp	N/A	1	Less than 5 horsepower
RMV-STR-10	RMV-P-10 MOT STR	PNL	480 VAC	15	1	Non-ventilated
SA-CPSR-MPF1	MPF AIR CPSR #1	CPSR	25 hp	9	1	
SA-CPSR-MPF2	MPF AIR CPSR #2	CPSR	25 hp	9	1	

FIRE ZONE: 25		FIRE COMPARTMENT: OG				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-LPGB1	OG BLDG LP LPGB1	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
EE-PNL-PPGB1	OG BLDG PP PPGB1	PNL		15	1	Non-ventilated - Robustly Secured
EE-STR-PPGB1 HV-OG-A	HV-OG-A STR ON PPGB1	PNL	480 VAC	15	1	Non-ventilated
EE-STR-Z1 SUMPZ	STR F/ DIV I Z SUMP P RW-P-Z1	PNL	480 VAC	15	1	Non-ventilated
EE-STR-Z2 SUMPZ	STR F/ Z SUMP P RW-P-Z2	PNL	480 VAC	15	1	Non-ventilated
EE-XFMR- CPU-3A_3B	KAMAN MICROCOMPUTER 120 VAC PWR COND	XFMR	1 kVA	N/A	1	Less than 45 kVA
EE-XFMR-LPGB1	XFMR F/ LTG PNL LPGB1 & LPGB2	XFMR	9 kVA	N/A	1	Less than 45 kVA
HV-AC- CPU-3A	ERP NORMAL RANGE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-AC- CPU-3B	ERP HIGH RANGE KAMAN ACU	AC	115V	N/A	1	Not considered ignition source
HV-FCU- HV-OG-1A	OG BLDG VENT UNIT	FCU	1-1/2 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-OG-1A	OG BLDG HV SELF CONTAINED UNIT HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
HV-HTR- EUH-OG-1B	OG BLDG HV SELF CONTAINED UNIT HTR	HTR	<5 hp	N/A	1	Less than 5 horsepower
LRP-PNL- 17-18	STACK GAS RACK 17-18	PNL	Instrument Rack	N/A	1	Not considered ignition source
LRP-PNL- LCP-HV-OG	OG BLDG HV LOC CONT PNL HV-OG	PNL		15	1	Non-ventilated - Not Secured
LRP-RACK-LR111	OG BLDG INSTR RACK 111	RACK		15	1	Non-ventilated - Robustly Secured
OG-FAN- DF-OG-1A	OG DILUTION FAN A	FAN	15 hp	26	1	
OG-FAN- DF-OG-1B	OG DILUTION FAN B	FAN	15 hp	26	1	
OG-P-ERPSA	ERP GAS SAMPLE P A	PMP	1 hp	N/A	1	Less than 5 horsepower
OG-P-ERPSB	ERP GAS SAMPLE P B	PMP	1 hp	N/A	1	Less than 5 horsepower
RMP-CPU-3A		PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
RMP-CPU-3B		PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
RMP-P-3A	ERP HI RANGE NORM SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMP-P-3B	ERP HI RANGE HI SAMPLE P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower
RMP-P-3C	ERP COND REMOVAL P	PMP	1-1/2 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: 26		FIRE COMPARTMENT: OWC				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-PNL-OWCH2A	480V OWC GG BLDG DIST PANEL	PNL	480 VAC	15	1	
EE-PNL-OWCH2B	120/208V OWC GG BLDG DIST PANEL	PNL	120/208 VAC	15	1	Non-ventilated - Robustly Secured
HV-AC-H2CR	OWC GAS GENERATION BLDG CONTROL ROOM	AC	< 5 hp	N/A	1	Less than 5 horsepower
HV-FAN-H2	OWC BLDG HYDROGEN ROOM EXHAUST FAN	FAN	5 hp	26	1	
HV-FAN-O2	OWC BLDG OXYGEN ROOM EXHAUST FAN	FAN	5 hp	26	1	
OWC-CPSR-H2A	H2 COMPRESSOR A	CPSR		9	1	
OWC-CPSR-H2B	H2 COMPRESSOR B	CPSR		9	1	
OWC-DRY-300	O2 IN H2 DRYER "A"	AIR DRY		N/A	1	Enclosed - not ignition source
OWC-DRY-301	O2 IN H2 DRYER "B"	AIR DRY		N/A	1	Enclosed - not ignition source
OWC-DRY-310	H2 IN O2 DRYER "A"	AIR DRY		N/A	1	Enclosed - not ignition source
OWC-DRY-311	H2 IN O2 DRYER "B"	AIR DRY		N/A	1	Enclosed - not ignition source
OWC-FAN-1	COOLING WATER HEAT EXCHANGER FAN 1	FAN		26	1	
OWC-FAN-2	COOLING WATER HEAT EXCHANGER FAN 2	FAN		26	1	
OWC-MCC-P700	P700 MOTOR CONTROL CENTER	MCC		15	1	
OWC-MOT-RECT FAN	RECTIFIER FAN MOTOR	MOT	1-1/2 hp	N/A	1	Less than 5 horsepower
OWC-P-CW702A	COOLING WATER PUMP A	PMP	5 hp	21	1	
OWC-P-CW702B	COOLING WATER PUMP B	PMP	5 hp	21	1	
OWC-PNL-P500	H2/O2 INJECTION SYSTEM CONTROL PNL	PNL	Ventilated	15	2	
OWC-PNL-P700	H2/O2 GENERATION SYSTEM CONTROL PNL	PNL		15	1	Non-ventilated - Robustly Secured
OWC-RECT-1	OWC RECTIFIER	RECT	480 VAC	15	1	
OWC-RECT-1	OWC RECTIFIER	RECT	480 VAC	16a	1	HEAF
OWC-TK-GAS402	H2 GASHOLDER	TNK		N/A	1	
OWC-XFMR-H2		XFMR	30 kVA	N/A	1	Less than 45 kVA
OWC-XFMR-H2PC		XFMR	120V	N/A	1	Less than 45 kVA
	MISCELLANEOUS HYDROGEN	MISC H2		19	1	

FIRE ZONE: CM		FIRE COMPARTMENT: CM				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
N/A	NO FIXED IGNITION SOURCES	N/A		N/A	1	

FIRE ZONE: DW		FIRE COMPARTMENT: DW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
BLDG-HST-C2	RB DW HST (BLDG-HST-C2)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-CRD1	CRD REMOVAL CHUTE HST	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H9A	DW SW HATCH HST H9A (BLDG-HST-H9A)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
BLDG-HST-H9B	DW NE HATCH HST H9B (BLDG-HST-H9B)	HOIST		N/A	1	Infrequent Use/Overcurrent Protection
HV-FAN- FC-R-1A	DW FCU FC-R-1A	FAN		26	1	
HV-FAN- FC-R-1B	DW FCU FC-R-1B	FAN		26	1	
HV-FAN- FC-R-1C	DW FCU FC-R-1C	FAN		26	1	
HV-FAN- FC-R-1D	DW FCU FC-R-1D	FAN		26	1	
MS-AOV-A080A	MS ISO V A INBOARD	MSIV		21	1	
MS-AOV-A080B	MS ISO V B INBOARD	MSIV		21	1	
MS-AOV-A080C	MS ISO V C INBOARD	MSIV		21	1	
MS-AOV-A080D	MS ISO V D INBOARD	MSIV		21	1	
NB-P-JP1	CAL JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP10	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP11	CAL JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP12	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP13	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP14	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP15	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP16	CAL JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP17	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP18	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP19	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP2	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP20	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP3	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP4	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP5	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP6	CAL JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP7	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP8	JET P	PMP		N/A	1	Not considered ignition source
NB-P-JP9	JET P	PMP		N/A	1	Not considered ignition source
RR-P-A	RR P A	PMP	5500 hp	21	1	

FIRE ZONE: DW		FIRE COMPARTMENT: DW				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
RR-P-B	RR P B	PMP	5500 hp	21	1	
RR-PNL-VA	RR VIB LOC PNL	PNL		15	1	
RR-PNL-VB	RR VIB LOC PNL	PNL		15	1	
RW-P-F1	DW FL DR SUMP P F1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-F2	DW FL DR SUMP P F2	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-G1	DW EQUIP DR SUMP P G1	PMP	3 hp	N/A	1	Less than 5 horsepower
RW-P-G2	DW EQUIP DR SUMP P G2	PMP	3 hp	N/A	1	Less than 5 horsepower

FIRE ZONE: YD		FIRE COMPARTMENT: YD				
Ignition Source ID	**Ignition Source Description**	**Equip Type**	**Attribute**	**BIN #**	**No. of Vertical Sections**	**Notes**
EE-P-A1	A MN XFMR OIL P - SOUTHEAST	PMP		21	1	
EE-P-A2	A MN XFMR OIL P - SOUTHWEST	PMP		21	1	
EE-P-A3	A MN XFMR OIL P - NORTHWEST	PMP		21	1	
EE-P-A4	A MN XFMR OIL P - NORTHEAST	PMP		21	1	
EE-P-B1	B MN XFMR OIL P - SOUTHEAST	PMP		21	1	
EE-P-B2	B MN XFMR OIL P - SOUTHWEST	PMP		21	1	
EE-P-B3	B MN XFMR OIL P - NORTHWEST	PMP		21	1	
EE-P-B4	B MN XFMR OIL P - NORTHEAST	PMP		21	1	
EE-P-C1	C MN XFMR OIL P - SOUTHEAST	PMP		21	1	
EE-P-C2	C MN XFMR OIL P - SOUTHWEST	PMP		21	1	
EE-P-C3	C MN XFMR OIL P - NORTHWEST	PMP		21	1	
EE-P-C4	C MN XFMR OIL P - NORTHEAST	PMP		21	1	
EE-P-S1	SPARE MN XFMR OIL P - SOUTHEAST	PMP		21	1	
EE-P-S2	SPARE MN XFMR OIL P - SOUTHWEST	PMP		21	1	
EE-P-S3	SPARE MN XFMR OIL P - NORTHWEST	PMP		21	1	
EE-P-S4	SPARE MN XFMR OIL P - NORTHEAST	PMP		21	1	
EE-XFMR-E	EMERG STA SERV XFMR	YD XFMR		27	1	
EE-XFMR-E	EMERG STA SERV XFMR	YD XFMR		28	1	
EE-XFMR-MAIN A	MN STEP STEP-UP XFMR PH A	YD XFMR		27	1	
EE-XFMR-MAIN A	MN STEP STEP-UP XFMR PH A	YD XFMR		28	1	
EE-XFMR-MAIN B	MN STEP STEP-UP XFMR PH B	YD XFMR		27	1	
EE-XFMR-MAIN B	MN STEP STEP-UP XFMR PH B	YD XFMR		28	1	
EE-XFMR-MAIN C	MN STEP STEP-UP XFMR PH C	YD XFMR		27	1	
EE-XFMR-MAIN C	MN STEP STEP-UP XFMR PH C	YD XFMR		28	1	
EE-XFMR-MAIN D	MN STEP STEP-UP XFMR INSTL SPARE	YD XFMR		27	1	
EE-XFMR-MAIN D	MN STEP STEP-UP XFMR INSTL SPARE	YD XFMR		28	1	
EE-XFMR-N	NORM STA SERV XFMR	YD XFMR		27	1	
EE-XFMR-N	NORM STA SERV XFMR	YD XFMR		28	1	
EE-XFMR-SU	STARTUP STA SERV XFMR	YD XFMR		27	1	
EE-XFMR-SU	STARTUP STA SERV XFMR	YD XFMR		28	1	
	ISOLATION PHASE BUS DUCT A	ISO PH		27	1	
	ISOLATION PHASE BUS DUCT B	ISO PH		27	1	
	ISOLATION PHASE BUS DUCT C	ISO PH		27	1	
	HYDROGEN STORAGE TANKS	HYD TK		17	4	

Attachment C

Transient Ignition Sources

Table C-1 - Fire Zone Self-Ignited Cable and Junction Box Ignition Frequencies

Fire Zone	Fire Comp	Generic Plant Location	Quantity (lbs)	Btu/Unit	Comments	Cable Load (Btu)	Ignition Source Weighting Factor, $W_{IS,J}$	Location Weighting Factor, W_L	Bin 12 Self-Ignited Cable Fire Zone Fire Frequency	Bin 18 Junction Box Fire Zone Fire Frequency
1A	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1B	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1C	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1D	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1E	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1F	RB-E	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
1G	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
2A-1	RB	Control/Auxiliary/Reactor Building	10234	12,165	CABLE	1.245E+08	2.078E-02	1	8.519E-05	3.948E-05
2A-2	RB	Control/Auxiliary/Reactor Building	20469	12,165	CABLE	2.490E+08	4.156E-02	1	1.704E-04	7.896E-05
2A-3	RB	Control/Auxiliary/Reactor Building	10234	12,165	CABLE	1.245E+08	2.078E-02	1	8.519E-05	3.948E-05
2B	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
2C	RB	Control/Auxiliary/Reactor Building	18732	12,165	CABLE	2.279E+08	3.803E-02	1	1.559E-04	7.226E-05
2D	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
2E	TB-C	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
3A	RB-J	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
3B	RB-K	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
3C	RB	Control/Auxiliary/Reactor Building	8508	12,165	CABLE	1.035E+08	1.727E-02	1	7.082E-05	3.282E-05
3D	RB	Control/Auxiliary/Reactor Building	3282	12,165	CABLE	3.993E+07	6.663E-03	1	2.732E-05	1.266E-05
3E-1	RB	Control/Auxiliary/Reactor Building	3960	12,165	CABLE	4.817E+07	8.040E-03	1	3.296E-05	1.528E-05
3E-2	RB	Control/Auxiliary/Reactor Building	1980	12,165	CABLE	2.409E+07	4.020E-03	1	1.648E-05	7.638E-06
4A	RB	Control/Auxiliary/Reactor Building	5789	12,165	CABLE	7.042E+07	1.175E-02	1	4.819E-05	2.233E-05
4B	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
4C	RB	Control/Auxiliary/Reactor Building	9270	12,165	CABLE	1.128E+08	1.882E-02	1	7.716E-05	3.576E-05
4D	RB	Control/Auxiliary/Reactor Building	2151	12,165	CABLE	2.617E+07	4.367E-03	1	1.790E-05	8.297E-06
5A	RB	Control/Auxiliary/Reactor Building	3163	12,165	CABLE	3.848E+07	6.421E-03	1	2.633E-05	1.220E-05
5B	RB	Control/Auxiliary/Reactor Building	17797	12,165	CABLE	2.165E+08	3.613E-02	1	1.481E-04	6.865E-05
6	RB	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00

Fire Zone	Fire Comp	Generic Plant Location	Quantity (lbs)	Btu/Unit	Comments	Cable Load (Btu)	Ignition Source Weighting Factor, $W_{IS,J}$	Location Weighting Factor, W_L	Bin 12 Self-Ignited Cable Fire Zone Fire Frequency	Bin 18 Junction Box Fire Zone Fire Frequency
7A	CB-A	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
7B	CB-A	Control/Auxiliary/Reactor Building	10	12,165	CABLE	1.217E+05	2.030E-05	1	8.324E-08	3.857E-08
8A	CB-D	Control/Auxiliary/Reactor Building	6603	12,165	CABLE	8.033E+07	1.341E-02	1	5.496E-05	2.547E-05
8B	CB-C	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
8C	CB-A	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
8D	CB-A	Control/Auxiliary/Reactor Building	30	20,000	CABLE(TRANSIENT)	6.000E+05	1.001E-04	1	4.105E-07	1.903E-07
8E	CB-A-1	Control/Auxiliary/Reactor Building	100	12,165	CABLE(MISC.)	1.217E+06	2.030E-04	1	8.324E-07	3.857E-07
8F	CB-B	Control/Auxiliary/Reactor Building	100	12,165	CABLE(MISC.)	1.217E+06	2.030E-04	1	8.324E-07	3.857E-07
8G	CB-B	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
8H	CB-A-1	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
9A	CB-D	Control/Auxiliary/Reactor Building	133639	12,165	CABLE	1.626E+09	2.713E-01	1	1.112E-03	5.155E-04
9B	CB-D	Control/Auxiliary/Reactor Building	7970	12,165	CABLE	9.696E+07	1.618E-02	1	6.634E-05	3.074E-05
10A	CB-D	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
10B	CB-D	Control/Auxiliary/Reactor Building	1859	12,165	CABLE(ETHERNET TRAY)	2.261E+07	3.774E-03	1	1.547E-05	7.171E-06
11A	TB-A	Turbine Building	1313	12,165	CABLE	1.597E+07	2.666E-03	1	1.093E-05	5.065E-06
11B	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
11C	TB-A	Turbine Building	34448	12,165	CABLE	4.191E+08	6.994E-02	1	2.867E-04	1.329E-04
11D	TB-A	Turbine Building	5000	12,165	CABLE(TRANSIENT)	6.083E+07	1.015E-02	1	4.162E-05	1.929E-05
11E	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
11F	TB-A	Turbine Building	17572	12,165	CABLE	2.138E+08	3.567E-02	1	1.463E-04	6.778E-05
11G	TB-A	Turbine Building	11482	12,165	CABLE	1.397E+08	2.331E-02	1	9.557E-05	4.429E-05
11H	TB-A	Turbine Building	19359	12,165	CABLE	2.355E+08	3.930E-02	1	1.611E-04	7.467E-05
11J	TB-A	Turbine Building	5109	12,165	CABLE	6.215E+07	1.037E-02	1	4.253E-05	1.971E-05
11K	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
11L	TB-A	Turbine Building	16986	12,165	CABLE	2.066E+08	3.448E-02	1	1.414E-04	6.552E-05
12A	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
12B	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
12C	TB-A	Turbine Building	10929	12,165	CABLE	1.330E+08	2.219E-02	1	9.097E-05	4.216E-05
12D	TB-A	Turbine Building	1234	12,165	CABLE	1.501E+07	2.505E-03	1	1.027E-05	4.760E-06
12E	TB-A	Turbine Building	48366	12,165	CABLE	5.884E+08	9.819E-02	1	4.026E-04	1.866E-04
12F	TB-A	Turbine Building	29655	12,165	CABLE	3.608E+08	6.021E-02	1	2.468E-04	1.144E-04

Fire Zone	Fire Comp	Generic Plant Location	Quantity (lbs)	Btu/Unit	Comments	Cable Load (Btu)	Ignition Source Weighting Factor, $W_{IS,J}$	Location Weighting Factor, W_L	Bin 12 Self-Ignited Cable Fire Zone Fire Frequency	Bin 18 Junction Box Fire Zone Fire Frequency
13A	TB-A	Turbine Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
13B	NCS	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
13C	TB-A	Plant-Wide Components	10711	12,165	CABLE	1.303E+08	2.175E-02	1	8.916E-05	4.132E-05
13D	TB-A	Plant-Wide Components	2	120,000	CABLE(IN CUBIC FEET)	2.400E+05	4.005E-05	1	1.642E-07	7.610E-08
14A	DG-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
14B	DG-B	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
14C	DG-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
14D	DG-B	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
15	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
16	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
17	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
18A	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
18B	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
18C	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
18D	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
18E	TB-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
19A	OB	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
19B	OB	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
19C	OB	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
20A	IS-A	Plant-Wide Components	395	12,165	CABLE	4.805E+06	8.019E-04	1	3.288E-06	1.524E-06
20B	IS-A	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
21A	RW	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
21B	RW	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
21C	RW	Plant-Wide Components	500	12,165	CABLE	6.083E+06	1.015E-03	1	4.162E-06	1.929E-06
21D	RW	Plant-Wide Components	9190	12,165	CABLE	1.118E+08	1.866E-02	1	7.650E-05	3.545E-05
22A	ARW	Plant-Wide Components	1708	12,165	CABLE	2.078E+07	3.468E-03	1	1.422E-05	6.588E-06
22B	ARW	Plant-Wide Components	2690	12,165	CABLE	3.272E+07	5.461E-03	1	2.239E-05	1.038E-05
22C	ARW	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
23A	YD	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
23B	YD	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
23C	YD	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
24	MPF	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00

Fire Zone	Fire Comp	Generic Plant Location	Quantity (lbs)	Btu/Unit	Comments	Cable Load (Btu)	Ignition Source Weighting Factor, $W_{IS,J}$	Location Weighting Factor, W_L	Bin 12 Self-Ignited Cable Fire Zone Fire Frequency	Bin 18 Junction Box Fire Zone Fire Frequency
25	OG	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
26	OWC	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
CM	CM	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
DW	DW	Control/Auxiliary/Reactor Building	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00
YD	YD	Plant-Wide Components	0	0	N/A	0.000E+00	0.000E+00	1	0.000E+00	0.000E+00

Total Plant Cable Load (BTU) 5.992E+09

Cable Insulation from Combustible Loading Calculation Rev. 4.1

Assumption 1: Diesel Generator rooms binned into Plant-Wide Components for transients analysis

Assumption 2: Battery rooms binned into Control/Aux/Rx Bldg for transients analysis

Assumption 3: Control Room binned into Control/Aux/Rx Bldg for transients analysis

Table C-2 - Location Weighting Factors and Fire Influencing Factors

Fire Zone	Fire Comp	Generic Plant Location	Location Weighting Factor W_L	Maintenance ($n_{m,J,L}$)	Occupancy ($n_{o,J,L}$)	Storage ($n_{s,J,L}$)	$\Sigma(n_{m,J,L} + n_{o,J,L} + n_{s,J,L})$	General Transient Weighting Factor $W_{GT,J,L}$	Transient (welding & cutting) Weighting Factor $W_{WC,J,L}$	Cable Load Ratio $W_{Cable,J}$	Cables (welding & cutting) Weighting Factor $W_{CF,J}$
1A	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
1B	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
1C	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
1D	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
1E	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
1F	RB-E	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	0.000E+00	0.000E+00
1G	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
2A-1	RB	Cntrl/Aux/Rx Bldg.	1	1	3	1	5	1.109E-02	3.623E-03	3.849E-02	8.427E-03
2A-2	RB	Cntrl/Aux/Rx Bldg.	1	10	3	1	14	3.104E-02	3.623E-02	7.698E-02	1.685E-01
2A-3	RB	Cntrl/Aux/Rx Bldg.	1	10	3	1	14	3.104E-02	3.623E-02	3.849E-02	8.427E-02
2B	RB	Cntrl/Aux/Rx Bldg.	1	10	1	1	12	2.661E-02	3.623E-02	0.000E+00	0.000E+00
2C	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	7.045E-02	1.542E-01
2D	RB	Cntrl/Aux/Rx Bldg.	1	10	1	1	12	2.661E-02	3.623E-02	0.000E+00	0.000E+00
2E	TB-C	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	0.000E+00	0.000E+00
3A	RB-J	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	0.000E+00	0.000E+00
3B	RB-K	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	0.000E+00	0.000E+00
3C	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	3.200E-02	7.006E-02
3D	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	1.234E-02	2.702E-02
3E-1	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	1.489E-02	3.261E-02
3E-2	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	7.446E-03	1.630E-02
4A	RB	Cntrl/Aux/Rx Bldg.	1	10	3	1	14	3.104E-02	3.623E-02	2.177E-02	4.767E-02
4B	RB	Cntrl/Aux/Rx Bldg.	1	10	1	3	14	3.104E-02	3.623E-02	0.000E+00	0.000E+00
4C	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	3.486E-02	7.633E-02
4D	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	8.090E-03	1.771E-02
5A	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	1.190E-02	2.605E-02
5B	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	6.693E-02	1.465E-01
6	RB	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
7A	CB-A	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
7B	CB-A	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	3.761E-05	2.470E-05
8A	CB-D	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	2.483E-02	5.437E-03
8B	CB-C	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	0.000E+00	0.000E+00

Fire Zone	Fire Comp	Generic Plant Location	Location Weighting Factor W_L	Maintenance ($n_{m,J,L}$)	Occupancy ($n_{o,J,L}$)	Storage ($n_{s,J,L}$)	$\Sigma(n_{m,J,L} + n_{o,J,L} + n_{s,J,L})$	General Transient Weighting Factor $W_{GT,J,L}$	Transient (welding & cutting) Weighting Factor $W_{WC,J,L}$	Cable Load Ratio $W_{Cable,J}$	Cables (welding & cutting) Weighting Factor $W_{CF,J}$
8C	CB-A	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	0.000E+00	0.000E+00
8D	CB-A	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	1.855E-04	1.218E-04
8E	CB-A-1	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	3.761E-04	2.470E-04
8F	CB-B	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	3.761E-04	2.470E-04
8G	CB-B	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	0.000E+00	0.000E+00
8H	CB-A-1	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	0.000E+00	0.000E+00
9A	CB-D	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	5.026E-01	1.100E-01
9B	CB-D	Cntrl/Aux/Rx Bldg.	1	1	1	1	3	6.652E-03	3.623E-03	2.997E-02	6.563E-03
10A	CB-D	Cntrl/Aux/Rx Bldg.	1	3	1	1	5	1.109E-02	1.087E-02	0.000E+00	0.000E+00
10B	CB-D	Cntrl/Aux/Rx Bldg.	1	1	10	1	12	2.661E-02	3.623E-03	6.991E-03	1.531E-03
11A	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	6.518E-03	7.053E-03
11B	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	0.000E+00	0.000E+00
11C	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	1.710E-01	1.850E-01
11D	TB-A	Turbine Building	1	10	1	3	14	5.018E-02	5.848E-02	2.482E-02	2.686E-02
11E	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	0.000E+00	0.000E+00
11F	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	8.723E-02	9.439E-02
11G	TB-A	Turbine Building	1	10	1	3	14	5.018E-02	5.848E-02	5.700E-02	6.168E-02
11H	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	9.610E-02	1.040E-01
11J	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	2.536E-02	2.744E-02
11K	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	0.000E+00	0.000E+00
11L	TB-A	Turbine Building	1	1	1	1	3	1.075E-02	5.848E-03	8.432E-02	9.124E-03
12A	TB-A	Turbine Building	1	10	1	3	14	5.018E-02	5.848E-02	0.000E+00	0.000E+00
12B	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	0.000E+00	0.000E+00
12C	TB-A	Turbine Building	1	10	1	3	14	5.018E-02	5.848E-02	5.425E-02	5.871E-02
12D	TB-A	Turbine Building	1	10	3	3	16	5.735E-02	5.848E-02	6.125E-03	6.629E-03
12E	TB-A	Turbine Building	1	10	1	3	14	5.018E-02	5.848E-02	2.401E-01	2.598E-01
12F	TB-A	Turbine Building	1	10	3	10	23	8.244E-02	5.848E-02	1.472E-01	1.593E-01
13A	TB-A	Turbine Building	1	10	3	10	23	8.244E-02	5.848E-02	0.000E+00	0.000E+00
13B	NCS	Cntrl/Aux/Rx Bldg.	1	10	3	3	16	3.548E-02	3.623E-02	0.000E+00	0.000E+00
13C	TB-A	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	4.248E-01	4.298E-01
13D	TB-A	Plant-Wide Components	1	1	3	3	7	1.486E-02	4.274E-03	7.825E-04	7.917E-05
14A	DG-A	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
14B	DG-B	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00

Fire Zone	Fire Comp	Generic Plant Location	Location Weighting Factor W_L	Maintenance ($n_{m,J,L}$)	Occupancy ($n_{o,J,L}$)	Storage ($n_{s,J,L}$)	$\Sigma(n_{m,J,L} + n_{o,J,L} + n_{s,J,L})$	General Transient Weighting Factor $W_{GT,J,L}$	Transient (welding & cutting) Weighting Factor $W_{WC,J,L}$	Cable Load Ratio $W_{Cable,J}$	Cables (welding & cutting) Weighting Factor $W_{CF,J}$
14C	DG-A	Plant-Wide Components	1	3	1	3	7	1.486E-02	1.282E-02	0.000E+00	0.000E+00
14D	DG-B	Plant-Wide Components	1	3	1	3	7	1.486E-02	1.282E-02	0.000E+00	0.000E+00
15	TB-A	Plant-Wide Components	1	10	1	3	14	2.972E-02	4.274E-02	0.000E+00	0.000E+00
16	TB-A	Plant-Wide Components	1	10	1	3	14	2.972E-02	4.274E-02	0.000E+00	0.000E+00
17	TB-A	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
18A	TB-A	Plant-Wide Components	1	10	3	10	23	4.883E-02	4.274E-02	0.000E+00	0.000E+00
18B	TB-A	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
18C	TB-A	Plant-Wide Components	1	3	3	10	16	3.397E-02	1.282E-02	0.000E+00	0.000E+00
18D	TB-A	Plant-Wide Components	1	3	3	10	16	3.397E-02	1.282E-02	0.000E+00	0.000E+00
18E	TB-A	Plant-Wide Components	1	3	3	10	16	3.397E-02	1.282E-02	0.000E+00	0.000E+00
19A	OB	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
19B	OB	Plant-Wide Components	1	1	10	10	21	4.459E-02	4.274E-03	0.000E+00	0.000E+00
19C	OB	Plant-Wide Components	1	1	3	3	7	1.486E-02	4.274E-03	0.000E+00	0.000E+00
20A	IS-A	Plant-Wide Components	1	3	3	3	9	1.911E-02	1.282E-02	1.567E-02	4.755E-03
20B	IS-A	Plant-Wide Components	1	3	3	3	9	1.911E-02	1.282E-02	0.000E+00	0.000E+00
21A	RW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
21B	RW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
21C	RW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	1.983E-02	2.006E-02
21D	RW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	3.645E-01	3.688E-01
22A	ARW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	6.774E-02	6.854E-02
22B	ARW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	1.067E-01	1.079E-01
22C	ARW	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
23A	YD	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
23B	YD	Plant-Wide Components	1	10	3	3	16	3.397E-02	4.274E-02	0.000E+00	0.000E+00
23C	YD	Plant-Wide Components	1	3	3	3	9	1.911E-02	1.282E-02	0.000E+00	0.000E+00
24	MPF	Plant-Wide Components	1	10	3	10	23	4.883E-02	4.274E-02	0.000E+00	0.000E+00
25	OG	Plant-Wide Components	1	10	1	3	14	2.972E-02	4.274E-02	0.000E+00	0.000E+00
26	OWC	Plant-Wide Components	1	3	3	3	9	1.911E-02	1.282E-02	0.000E+00	0.000E+00
CM	CM	Plant-Wide Components	1	1	1	1	3	6.369E-03	4.274E-03	0.000E+00	0.000E+00
DW	DW	Cntrl/Aux/Rx Bldg.	1	0	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00
YD	YD	Plant-Wide Components	1	3	1	3	7	1.486E-02	1.282E-02	0.000E+00	0.000E+00

Assumption 1: Diesel Generator rooms binned into Plant-Wide Components for transients analysis
Assumption 2: Battery rooms binned into Control/Aux/Rx Bldg for transients analysis
Assumption 3: Control Room binned into Control/Aux/Rx Bldg for transients analysis
Assumption 4: Yard areas binned into Plant-Wide Components for transients analysis

Table C-3 - Transient Ignition Frequencies

Fire Zone	Fire Comp	Generic Plant Location	Cntrl/ Aux/ Rx Bldg Cables Fire (welding & cutting) (Bin 5)	Cntrl/ Aux/ Rx Bldg Transient Fire (welding & cutting) (Bin 6)	Cntrl/ Aux/ Rx Bldg Transient Fire (Bin 7)	Plant-Wide Cable Fire (welding & cutting) (Bin 11)	Plant-Wide Transient (welding & cutting) (Bin 24)	Plant-Wide Transient (Bin 25)	Turb Bldg Cable (welding & cutting) (Bin 31)	Turb Bldg Transient (welding & cutting) (Bin 36)	Turb Bldg Transient (Bin 37)	Total Fire Zone Transient Freq
1A	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
1B	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
1C	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
1D	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
1E	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
1F	RB-E	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-05	2.594E-05							6.109E-05
1G	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
2A-1	RB	Cntrl/Aux/Rx Bldg.	1.348E-05	3.514E-05	4.324E-05							9.187E-05
2A-2	RB	Cntrl/Aux/Rx Bldg.	2.697E-04	3.514E-04	1.211E-04							7.422E-04
2A-3	RB	Cntrl/Aux/Rx Bldg.	1.348E-04	3.514E-04	1.211E-04							6.073E-04
2B	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.038E-04							4.552E-04
2C	RB	Cntrl/Aux/Rx Bldg.	2.468E-04	3.514E-04	1.384E-04							7.366E-04
2D	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.038E-04							4.552E-04
2E	TB-C	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-05	2.594E-05							6.109E-05
3A	RB-J	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-05	2.594E-05							6.109E-05
3B	RB-K	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-05	2.594E-05							6.109E-05
3C	RB	Cntrl/Aux/Rx Bldg.	1.121E-04	3.514E-04	1.384E-04							6.019E-04
3D	RB	Cntrl/Aux/Rx Bldg.	4.324E-05	3.514E-04	1.384E-04							5.330E-04
3E-1	RB	Cntrl/Aux/Rx Bldg.	5.217E-05	3.514E-04	1.384E-04							5.420E-04
3E-2	RB	Cntrl/Aux/Rx Bldg.	2.609E-05	3.514E-04	1.384E-04							5.159E-04
4A	RB	Cntrl/Aux/Rx Bldg.	7.627E-05	3.514E-04	1.211E-04							5.488E-04
4B	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.211E-04							4.725E-04
4C	RB	Cntrl/Aux/Rx Bldg.	1.221E-04	3.514E-04	1.384E-04							6.119E-04
4D	RB	Cntrl/Aux/Rx Bldg.	2.834E-05	3.514E-04	1.384E-04							5.181E-04
5A	RB	Cntrl/Aux/Rx Bldg.	4.167E-05	3.514E-04	1.384E-04							5.315E-04
5B	RB	Cntrl/Aux/Rx Bldg.	2.345E-04	3.514E-04	1.384E-04							7.243E-04
6	RB	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
7A	CB-A	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
7B	CB-A	Cntrl/Aux/Rx Bldg.	3.952E-08	1.054E-04	4.324E-05							1.487E-04
8A	CB-D	Cntrl/Aux/Rx Bldg.	8.699E-06	3.514E-05	2.594E-05							6.979E-05

Fire Zone	Fire Comp	Generic Plant Location	Cntrl/ Aux/ Rx Bldg Cables Fire (welding & cutting) (Bin 5)	Cntrl/ Aux/ Rx Bldg Transient Fire (welding & cutting) (Bin 6)	Cntrl/ Aux/ Rx Bldg Transient Fire (Bin 7)	Plant-Wide Cable Fire (welding & cutting) (Bin 11)	Plant-Wide Transient (welding & cutting) (Bin 24)	Plant-Wide Transient (Bin 25)	Turb Bldg Cable (welding & cutting) (Bin 31)	Turb Bldg Transient (welding & cutting) (Bin 36)	Turb Bldg Transient (Bin 37)	Total Fire Zone Transient Freq
8B	CB-C	Cntrl/Aux/Rx Bldg.	0.000E+00	1.054E-04	4.324E-05							1.487E-04
8C	CB-A	Cntrl/Aux/Rx Bldg.	0.000E+00	1.054E-04	4.324E-05							1.487E-04
8D	CB-A	Cntrl/Aux/Rx Bldg.	1.949E-07	1.054E-04	4.324E-05							1.489E-04
8E	CB-A-1	Cntrl/Aux/Rx Bldg.	3.952E-07	1.054E-04	4.324E-05							1.491E-04
8F	CB-B	Cntrl/Aux/Rx Bldg.	3.952E-07	1.054E-04	4.324E-05							1.491E-04
8G	CB-B	Cntrl/Aux/Rx Bldg.	0.000E+00	1.054E-04	4.324E-05							1.487E-04
8H	CB-A-1	Cntrl/Aux/Rx Bldg.	0.000E+00	1.054E-04	4.324E-05							1.487E-04
9A	CB-D	Cntrl/Aux/Rx Bldg.	1.761E-04	3.514E-05	2.594E-05							2.372E-04
9B	CB-D	Cntrl/Aux/Rx Bldg.	1.050E-05	3.514E-05	2.594E-05							7.159E-05
10A	CB-D	Cntrl/Aux/Rx Bldg.	0.000E+00	1.054E-04	4.324E-05							1.487E-04
10B	CB-D	Cntrl/Aux/Rx Bldg.	2.449E-06	3.514E-05	1.038E-04							1.414E-04
11A	TB-A	Turbine Building							1.128E-05	4.795E-04	4.244E-04	9.152E-04
11B	TB-A	Turbine Building							0.000E+00	4.795E-04	4.244E-04	9.039E-04
11C	TB-A	Turbine Building							2.961E-04	4.795E-04	4.244E-04	1.200E-03
11D	TB-A	Turbine Building							4.297E-05	4.795E-04	3.713E-04	8.938E-04
11E	TB-A	Turbine Building							0.000E+00	4.795E-04	4.244E-04	9.039E-04
11F	TB-A	Turbine Building							1.510E-04	4.795E-04	4.244E-04	1.055E-03
11G	TB-A	Turbine Building							9.868E-05	4.795E-04	3.713E-04	9.495E-04
11H	TB-A	Turbine Building							1.664E-04	4.795E-04	4.244E-04	1.070E-03
11J	TB-A	Turbine Building							4.391E-05	4.795E-04	4.244E-04	9.478E-04
11K	TB-A	Turbine Building							0.000E+00	4.795E-04	4.244E-04	9.039E-04
11L	TB-A	Turbine Building							1.460E-05	4.795E-05	7.957E-05	1.421E-04
12A	TB-A	Turbine Building							0.000E+00	4.795E-04	3.713E-04	8.509E-04
12B	TB-A	Turbine Building							0.000E+00	4.795E-04	4.244E-04	9.039E-04
12C	TB-A	Turbine Building							9.393E-05	4.795E-04	3.713E-04	9.448E-04
12D	TB-A	Turbine Building							1.061E-05	4.795E-04	4.244E-04	9.145E-04
12E	TB-A	Turbine Building							4.157E-04	4.795E-04	3.713E-04	1.267E-03
12F	TB-A	Turbine Building							2.549E-04	4.795E-04	6.100E-04	1.344E-03
13A	TB-A	Turbine Building							0.000E+00	4.795E-04	6.100E-04	1.090E-03
13B	NCS	Cntrl/Aux/Rx Bldg.	0.000E+00	3.514E-04	1.384E-04							4.898E-04
13C	TB-A	Plant-Wide Components				8.596E-04	2.094E-04	3.363E-04				1.405E-03
13D	TB-A	Plant-Wide Components				1.583E-07	2.094E-05	1.471E-04				1.682E-04

Fire Zone	Fire Comp	Generic Plant Location	Cntrl/ Aux/ Rx Bldg Cables Fire (welding & cutting) (Bin 5)	Cntrl/ Aux/ Rx Bldg Transient Fire (welding & cutting) (Bin 6)	Cntrl/ Aux/ Rx Bldg Transient Fire (Bin 7)	Plant-Wide Cable Fire (welding & cutting) (Bin 11)	Plant-Wide Transient (welding & cutting) (Bin 24)	Plant-Wide Transient (Bin 25)	Turb Bldg Cable (welding & cutting) (Bin 31)	Turb Bldg Transient (welding & cutting) (Bin 36)	Turb Bldg Transient (Bin 37)	Total Fire Zone Transient Freq
14A	DG-A	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
14B	DG-B	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
14C	DG-A	Plant-Wide Components				0.000E+00	6.282E-05	1.471E-04				2.100E-04
14D	DG-B	Plant-Wide Components				0.000E+00	6.282E-05	1.471E-04				2.100E-04
15	TB-A	Plant-Wide Components				0.000E+00	2.094E-04	2.943E-04				5.037E-04
16	TB-A	Plant-Wide Components				0.000E+00	2.094E-04	2.943E-04				5.037E-04
17	TB-A	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
18A	TB-A	Plant-Wide Components				0.000E+00	2.094E-04	4.834E-04				6.928E-04
18B	TB-A	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
18C	TB-A	Plant-Wide Components				0.000E+00	6.282E-05	3.363E-04				3.991E-04
18D	TB-A	Plant-Wide Components				0.000E+00	6.282E-05	3.363E-04				3.991E-04
18E	TB-A	Plant-Wide Components				0.000E+00	6.282E-05	3.363E-04				3.991E-04
19A	OB	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
19B	OB	Plant-Wide Components				0.000E+00	2.094E-05	4.414E-04				4.623E-04
19C	OB	Plant-Wide Components				0.000E+00	2.094E-05	1.471E-04				1.681E-04
20A	IS-A	Plant-Wide Components				9.511E-06	6.282E-05	1.892E-04				2.615E-04
20B	IS-A	Plant-Wide Components				0.000E+00	6.282E-05	1.892E-04				2.520E-04
21A	RW	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
21B	RW	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
21C	RW	Plant-Wide Components				4.013E-05	2.094E-04	3.363E-04				5.858E-04
21D	RW	Plant-Wide Components				7.376E-04	2.094E-04	3.363E-04				1.283E-03
22A	ARW	Plant-Wide Components				1.371E-04	2.094E-04	3.363E-04				6.828E-04
22B	ARW	Plant-Wide Components				2.159E-04	2.094E-04	3.363E-04				7.616E-04
22C	ARW	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
23A	YD	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
23B	YD	Plant-Wide Components				0.000E+00	2.094E-04	3.363E-04				5.457E-04
23C	YD	Plant-Wide Components				0.000E+00	6.282E-05	1.892E-04				2.520E-04
24	MPF	Plant-Wide Components				0.000E+00	2.094E-04	4.834E-04				6.928E-04
25	OG	Plant-Wide Components				0.000E+00	2.094E-04	2.943E-04				5.037E-04
26	OWC	Plant-Wide Components				0.000E+00	6.282E-05	1.892E-04				2.520E-04
CM	CM	Plant-Wide Components				0.000E+00	2.094E-05	6.306E-05				8.400E-05
DW	DW	Cntrl/Aux/Rx Bldg.	0.000E+00	0.000E+00	0.000E+00							0.000E+00

Fire Zone	Fire Comp	Generic Plant Location	Cntrl/ Aux/ Rx Bldg Cables Fire (welding & cutting) (Bin 5)	Cntrl/ Aux/ Rx Bldg Transient Fire (welding & cutting) (Bin 6)	Cntrl/ Aux/ Rx Bldg Transient Fire (Bin 7)	Plant-Wide Cable Fire (welding & cutting) (Bin 11)	Plant-Wide Transient (welding & cutting) (Bin 24)	Plant-Wide Transient (Bin 25)	Turb Bldg Cable (welding & cutting) (Bin 31)	Turb Bldg Transient (welding & cutting) (Bin 36)	Turb Bldg Transient (Bin 37)	Total Fire Zone Transient Freq
YD	YD	Plant-Wide Components				0.000E+00	6.282E-05	1.471E-04				2.100E-04

Assumption 1: Diesel Generator rooms binned into Plant-Wide Components for transients analysis

Assumption 2: Battery rooms binned into Control/Aux/Rx Bldg for transients analysis

Assumption 3: Control Room binned into Control/Aux/Rx Bldg for transients analysis

Assumption 4: Yard areas binned into Plant-Wide Components for transients analysis

Attachment D

Fire Events

Table D-1 - Fire Event Assessment

CAP ID	No.	Date of Event	Remarks	Apparent Cause Information	Potentially challenging, not challenging, undetermined (Note 1)	Inclusion in analysis (screened/not screened)	Screening Basis	BIN #	Comment, BIN description
CR-2006-09006	1	11/11/06	Fire involving electrical heat trace for A SLC pump.	Arcing between a conductor and the grounded metal shielding occurred. The circuit was not protected by a ground fault protection device. The affected wiring was about 8 years old, and was in an area that could be inadvertently struck by foot traffic, carried items, etc.	not challenging	screened	Damage was limited to a small length of heat trace wire.	N/A	N/A
CR-2006-2152	2	3/20/06	Electrical fire on in conduit associated with 12.5 kV to Ionics skid outside Water Treatment Plant	Root Cause contributes ignition due to improper bend radius in cable inside conduit. Cable failed and shorted to conduit causing an arc event. Fire was due to cable insulation burning.	potentially challenging	not screened		12	Plant-Wide Components Cable Run
CR-2006-01589	3	1/9/06	Hot slag from cutting and welding ignited a small piece of tape inside a metal tank.	No formal Cause Evaluation	not challenging	screened	Fire would have been limited to initial combustible if fire watch were not involved.	N/A	N/A
CR-2006-8653	4	11/28/2005	Hot slag from cutting and weld ignited a small piece of tape used to secure welding blankets inplace.	No formal Cause Evaluation	not challenging	screened	Fire would have been limited to initial combustible if fire watch were not involved.	N/A	N/A
CR 2005-03967	5	5/25/05	Admin Bldg Penthouse fire, duct heater electric contactor overheated because it was undersized, previous CAP item on 2nd heater previously identified as incorrectly designed	pending, appears to be related to inadequate corrective action of a previously identified design deficiency	not challenging	screened	Auto trip of component removed power and stopped fire. Damage limited to the component.	N/A	N/A

CAP ID	No.	Date of Event	Remarks	Apparent Cause Information	Potentially challenging, not challenging, undetermined (Note 1)	Inclusion in analysis (screened/not screened)	Screening Basis	BIN #	Comment, BIN description
CR 2005-03281	6	4/27/05	Screen Wash pump motor failure	motor lead connection failure, PM'd in 2002 and scheduled for March 2005 but cancelled as a result of PMO, existing PM's included thermography, MCE, oil level (failed to predict failure), new PM's are being created to monitor on-line current	potentially challenging	not screened		21	Plant-Wide Components Pumps
CR 2005-02663	7	4/1/05	hot work in Water Treatment, spark caused HEPA filter to ignite, entered 5.4FIRE	snapshot assessment performed common cause evaluation, concluded that failure to adequately contain spark due to improper hot work containment, and failure to consider spurious fire alarms or potential to activate suppression during hot work	potentially challenging	not screened		24	Plant-Wide Components Transient Fires Caused by Welding and Cutting
CR 2005-02295	8	3/14/05	CR 2005-02295 MPF fire due to failed metal halide lamp which ignited trash	cause attributed to inappropriate use of open fixture HID lights over area that contains combustibles, contributing causes included poor housekeeping and deficiency with respect to non-nuclear safety standards and OE	potentially challenging	not screened		25	Plant-Wide Components Transients
CR 2005-00980	9	1/30/05	B RPS MG Set motor fire	motor failure, original installation, existing PM's included vibration monitoring, thermography, and oil level, PMO will add on-line and off-line testing , cause was unidentified age-related degradation of motor insulation	potentially challenging	not screened		22	Plant-Wide Components RPS MG sets
CR 2005-00874	10	1/27/05	GFCI failed in heater bay	Evaluated under CR 2005-2663	not challenging	screened	Plant shut down at the time.	N/A	N/A
CR 2005-00843	11	1/27/05	FME bladders near condenser, fire watch extinguished	No formal Cause Evaluation	not challenging	screened	Plant shut down at the time.	N/A	N/A
CR 2005-00710	12	1/24/05	FME bladder in heater bay during hot work	No formal Cause Evaluation	not challenging	screened	Plant shut down at the time.	N/A	N/A

CAP ID	No.	Date of Event	Remarks	Apparent Cause Information	Potentially challenging, not challenging, undetermined (Note 1)	Inclusion in analysis (screened/not screened)	Screening Basis	BIN #	Comment, BIN description
Notification 10285764	13	12/13/03	Aux Steam Boiler 12.5kV disconnect during indicating light replacement, Fire Brigade leader was dispatched to assist with the event. After power removed fire self extinguished.	No formal Cause Evaluation	potentially challenging	not screened		15	Check that this is a panel fire Panel fire in Aux Boiler Room, panel for one of the aux boilers.. What panel?
SCR 2003-1844	14	10/28/03	A layer of dust possibly generated by recent crop harvest settled on ceramic insulators. Normally harmless, but a light mist of fog settled on the isulators dampening them. The moist dust on the insulators became capable of transporting current. A charge began to build on the insulator stack where it attaches to the wooden cross member. This buildup is known as corona effect. The wooden cross member also had the same moist dust as the insulators and since moist dust isn't a good conductor the natural resistance ignited the dust and with the assistance of a midwestern wind the cross member ignited also. - Dr. Randall Noon Due to the close proximity to the 345KV lines the fire was not attacked by the fire department until the power was secured. When this finally occurred the cross member failed and the portion that fell was extinguished with a dry chemical extinguisher. The remaining fire self extinguished on the remants of the cross member still attached to the pole.	causes were failure to properly ground insulator strings on wooden cross arms, and missed opportunity to evaluate 1997 Booneville line fire, contributing cause was natural phenomenon	not challenging	screened	Fire outdoors. No plant transient or potential for transient.	N/A	N/A
SCR 2003-1808	15	10/16/03	TG Lube Oil - Fire was initially controlled and extinguished at 12:39, but reflashed again at 12:54, was extinguished at 12:59 and reflashed again at 13:06 and was extinguished again, but formal declaration of fire being extinguished did not occur till approximately 13:36. The actual amount of time a visible flame and smoke generation were observable in my estimates were less than 30 minutes.	cause attributed to inappropriate procedure change that allowed both vapor extractors to be removed from service, and inadequate engineering work practice associated with verifying design requirements, contributing cause was design of aux vapor extractor	potentially challenging	not screened		35	Turbine Building T/G Oil

CAP ID	No.	Date of Event	Remarks	Apparent Cause Information	Potentially challenging, not challenging, undetermined (Note 1)	Inclusion in analysis (screened/not screened)	Screening Basis	BIN #	Comment, BIN description
Notification 10236986	16	3/28/03	smoke from Control Room seismic panel	No formal Cause Evaluation	potentially challenging	not screened		15	Plant-Wide Components Electrical Cabinets
Notification 10217326	17	12/31/02	heater failure in simulator duct, repaired by vendor	No formal Cause Evaluation	not challenging	screened	Smoke caused by burn off of dust	N/A	N/A
Notification 10204456	18	10/31/02	Access Road, portable generator wood cover	No formal Cause Evaluation	not challenging	screened	Fire outdoors. Not near any plant equipment. No plant transient or potential for transient.	N/A	N/A
DD 10203379	19	10/26/02	fire pad grass fire	No formal Cause Evaluation	not challenging	screened	Fire outdoors. Not near any plant equipment. No plant transient or potential for transient.	N/A	N/A
RCR 2002-1855	20	8/23/02	fire blanket in MPF during torch cutting	cause was cramped work area during hot work	potentially challenging	not screened		6	Control/Auxiliary/Reactor Building Transient Fires Caused by Welding and Cutting
RCR 2001-1423	21	11/30/01	rag ignited during hot work in Torus basement	No formal Cause Evaluation	not challenging	screened	Plant shut down at the time.	N/A	N/A
RCR 2001-1407	22	11/27/01	rag ignited during hot work in Torus basement	cause was failure to remove all combustibles under hot work area, and failure of fire watch to sweep the area thirty minutes after hot work completed	not challenging	screened	Plant shut down at the time.	N/A	N/A
RCR 2001-5316	23	11/25/01	rag ignited during hot work in Torus basement	Tied to 2001-1407	not challenging	screened	Plant shut down at the time.	N/A	N/A

CAP ID	No.	Date of Event	Remarks	Apparent Cause Information	Potentially challenging, not challenging, undetermined (Note 1)	Inclusion in analysis (screened/not screened)	Screening Basis	BIN #	Comment, BIN description
RCR 2001-0670	24	7/10/01	chem lab power supply	Internal power supply, faulty component failure.	potentially challenging	not screened		23	Plant-Wide Components Transformers
SCR 2001-0567	25	6/25/01	SU Transformer center phase PT failed	cause was failure to communicate the need for switchyard maintenance that is more rigorous than NPPD T&D standards, corrective action included PM's to replace 'critical' oil filled PT's and CT's, and to perform inspection and thermography	potentially challenging	not screened		27	Transformer Yard Transformer-Catastrophic
RCR 2000-0233	26	3/15/00	hot work, hot particle sucked into vacuum cleaner	cause was scale that was smoldering, not considered combustible	not challenging	screened	Plant shut down at the time.	N/A	N/A
SCR 99-0656	27	9/17/99	On September 17, 1999 the station experienced a hydrogen burn within the off gas systems. The burn was contained in a sump that receives condensate inputs from the elevated release point, offgas filter pit drains, offgas building floor drains, 48 inch holdup pipe, mechanical vacuum pumps, and offgas dilution fans. The burn occurred after a backup sump pump was started by operations. There were no injuries or abnormal damage from the event. The station was preparing for restart on September 23, 1999	cause involved failure to recognize hydrogen in Z sump during MP 97-100, and inadequate procedural guidance that allowed AOG to connect to Z-sump, contributing factors included infrequent operation (startup of AOG with 2nd set of SJAE's in service) and inconsistent procedural guidance	not challenging	screened	Plant shut down at the time.	N/A	N/A
SCR 99-0445	28	6/29/99	SCBA in C-van on fire pad exploded, due to caulking dripping during fire training	cause was failure to conform to management expectation related to hot work, and Procedure 0.39 regarding areas exempted from hot work requirements	not challenging	screened	Fire outdoors. Not near any plant equipment. No plant transient or potential for transient.	N/A	N/A

Note 1: NUREG/CR-6850, Appendix C