Enclosures 3 through 7 contain ~~Security Related Information - Withhold Under 10 CFR 2.390.~~ Upon removal of Enclosures 3, 4, 5, 6 and 7, this document is decontrolled.

FPL

L-2015-211
10 CFR 50.90

August 21, 2015

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Response to Request for Additional Information Regarding License Amendment Request for Transition to 10 CFR 50.48(c) - NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)

References:

1. FPL letter L-2013-099 dated March 22, 2013: Transition to 10 CFR 50.48(c) – NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)
2. FPL letter L-2014-056 dated February 24, 2014: 60-Day Response to Request for Additional Information Regarding License Amendment Request for Transition to 10 CFR 50.48(c) - NFPA 805
3. FPL letter L-2014-083 dated March 25, 2014: 90-Day Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
4. FPL letter L-2014-109 dated April 25, 2014: 120-Day Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
5. FPL letter L-2014-203 dated July 14, 2014: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
6. FPL letter L-2014-270 dated August 27, 2014: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
7. FPL letter L-2014-289 dated September 10, 2014: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805

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8. FPL letter L-2014-314 dated October 10, 2014: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
9. FPL letter L-2015-068 dated March 10, 2015: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
10. FPL letter L-2015-104 dated April 1, 2015: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
11. FPL letter L-2015-134 dated April 20, 2015: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
12. FPL letter L-2015-145 dated May 12, 2015: Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805
13. NRC letter dated July 30, 2015: St. Lucie Plant, Units 1 and 2 - Request for Additional Information on License Amendment Request to Adopt National Fire Protection Association Standard 805, Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants (TAC Nos. MF1373 and MF1374)

Per Reference 1 above, Florida Power and Light Company (FPL) requested an amendment to the Renewed Facility Operating License (RFOL) for St. Lucie Units 1 and 2. The License Amendment Request (LAR) will enable FPL to adopt a new fire protection licensing basis which complies with the requirements in 10 CFR 50.48(a) and (c) and the guidance in Revision 1 of Regulatory Guide (RG) 1.205.

Per References 2 through 11, FPL responded to specific NRC requests for additional information to clarify aspects of the LAR submittal. Reference 12 provided supplemental clarification to information previously provided per References 1 through 11. By letter dated July 30, 2015 (Reference 13), the NRC Staff requested additional information regarding the LAR. Enclosure 1 to this letter provides the detailed response to this request for additional information. As requested by conversation with the staff on Aug. 19, 2015, RAI Response PSL RAI PRA S01(c) concludes that there is no impact to the HEAF sensitivity study as documented in L-2015-104 as a result of any of the fire PRA information provided in this submittal. Enclosures 2 through 7 provide additional supplemental clarification to information previously provided per References 1 through 12.

The information provided in this submittal does not impact the 10 CFR 50.92 evaluation of "No Significant Hazards Consideration" previously provided in FPL letter L-2013-099 (Reference 1).

This letter makes new commitments and changes existing commitments. The commitment revisions are included in Enclosure 5 as mark-ups to Attachment S, Modifications and Implementation Items, Table S-1, Plant Modifications Committed. The complete set of

commitments is provided by Enclosure 6 as a retyped version of the updated LAR Attachment S, Modifications and Implementation Items, replacing it in its entirety.

FPL requests that Enclosures 3 through 7, which contains security-related information, be withheld from public disclosure in accordance with 10 CFR 2.390. Upon removal of Enclosures 3, 4, 5, 6 and 7, this document is decontrolled.

Should you have any questions regarding this application, please contact Mr. Eric Katzman, Licensing Manager, at 772-467-7734.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 21, 2015.

Respectfully submitted,

Christopher R. Costanzo

Christopher R. Costanzo
Site Vice President
St. Lucie Plant

CRC/rcs

Enclosures:
1. St. Lucie Units 1 and 2 NFPA 805 LAR RAI Response
2. Summary of Changes made to the St. Lucie Units 1 and 2 NFPA 805 LAR
3. Markup of LAR Attachment C Table C-1 - Withheld from Public Disclosure
4. Markup of LAR Attachment G 1 - Withheld from Public Disclosure
5. Markup of LAR Attachment S Table S-1 - Withheld from Public Disclosure
6. Clean copy of LAR Attachment S 1 - Withheld from Public Disclosure
7. Replacement LAR Attachment W Tables W-6 and W-7 1 - Withheld from Public Disclosure

cc: Ms. Cindy Becker, Florida Department of Health
USNRC Regional Administrator, Region II
USNRC Senior Resident Inspector, St. Lucie Units 1 and 2

Enclosure 1 to L-2015-211
Response to RAI PRA S01

PSL RAI PRA S01 (a)

During a conference call on June 29, 2015, the licensee stated that some newly identified variances from deterministic requirements and lack of breaker coordination failures will be added to the LAR and incorporated into an updated PRA. No other changes to the LAR or the PRA were identified. The licensee further stated that they intend to submit revised Attachments C, G, S, and W. After a review of the previously submitted information, the NRC staff has concluded that the following information is also needed to complete the review of the updated PRA.

a) Verify the validity of all entries in the table that was provided in the response to PRA RAI 21.b (letter dated October 10, 2014) that summarizes how PRA method issues have been addressed. If any entries change for the updated PRA, submit a new table together with a red-line strike-out version identifying the changes.

RESPONSE:

No changes to the table that was provided in the response to PRA RAI 21.b (FPL Letter L-2014-314, dated October 10, 2014) result from the analysis update. No change in methods were applied in this update.

PSL RAI PRA S01 (b)

During a conference call on June 29, 2015, the licensee stated that some newly identified variances from deterministic requirements and lack of breaker coordination failures will be added to the LAR and incorporated into an updated PRA. No other changes to the LAR or the PRA were identified. The licensee further stated that they intend to submit revised Attachments C, G, S, and W. After a review of the previously submitted information, the NRC staff has concluded that the following information is also needed to complete the review of the updated PRA.

b) Summarize all changes made to the PRA.

RESPONSE:

Subsequent to the St. Lucie Round 2 RAI submittal several updates have been made to the fire PRA model. FPL has identified several instances in which load circuits were not properly coordinated and the loss of the load could lead to loss of the power supply, these will be corrected by modifications to the plant to ensure electrical coordination (refer to Enclosure 2 and 5 for information on these added modifications). Load cables have been added to the fire PRA such that they will lead to a failure of power panels 118 &119, as a result no additional modification to these panels will be required. This change has led to no measureable increase in the St Lucie Unit 1 fire PRA risk results.

Since the fire PRA was updated in support of RAI responses (the results of which were documented in FPL Letter L-2014-14, dated October 10, 2014) the PSL Unit 1 and Unit 2 safe shutdown analysis has been revised. Several new VFDRs have been identified and incorporated into the fire PRA. There is no impact from the new VFDRs on the variant case model quantification. The impact on the delta risk was small.

In addition to these updates, inconsistencies in the analyses were identified which were resolved in conjunction with this update. It was found that on the Unit 1 CEDM panels in the cable spreading room that credit for detection was being double counted. Credit for in panel detection was included in the NSP as well as directly accounted for in the severity factor. A review of other scenarios has been performed and this was the only instance of double counting that was identified. The impact on the Unit 1 CDF and LERF is an increase in risk of 3.95E-06 and 2.32E-07.

The Bin 19 EEU count for miscellaneous hydrogen fires has been updated to be in line with current counting methods. This update led to an increase in Unit 1 CDF and LERF of 4.27E-07 and 4.50E-08, respectively. Unit 2 CDF and LERF saw a decrease in risk of 4.74E-06 and 1.07E-06, respectively. The total U1 and U2 plant risk is provided below.

Several scenarios needed to be updated to reflect the current fire PRA model. The net impact was a decrease in plant risk for Unit 2 CDF and LERF of 4.17E-06 and 1.30E-07, respectively. The cumulative impact on PSL Unit 1 and Unit 2 CDF and LERF are given below.

St. Lucie Unit 1 and Unit 2 Total Fire Risk and Fire Delta Risk (baseline results using NUREG/CR-6850, Supplement 1 Ignition frequencies)				
	Variant CDF	Delta CDF	Variant LERF	Delta LERF
PSL U1	4.60E-05	2.14E-05	7.97E-06	3.37E-06
PSL U2	4.70E-05	1.10E-05	7.30E-06	1.92E-06

Note: Delta CDF and LERF for both Unit 1 and Unit 2 exceed Reg. guide 1.174 limits. However, significant offsets for non-VFDR related plant modifications reduce them to within guidelines. See Enclosure 7 for updated Tables W-6 and W-7 reflecting the updated analysis results.

PSL RAI PRA S01 (c)

During a conference call on June 29, 2015, the licensee stated that some newly identified variances from deterministic requirements and lack of breaker coordination failures will be added to the LAR and incorporated into an updated PRA. No other changes to the LAR or the PRA were identified. The licensee further stated that they intend to submit revised Attachments C, G, S, and W. After a review of the previously submitted information, the NRC staff has concluded that the following information is also needed to complete the review of the updated PRA.

c) The response to PRA 01.m.01.01 (letter dated April 1, 2015) provided the increases in core damage frequency (CDF), Δ CDF, large early release frequency (LERF), and Δ LERF arising from using the high energy arcing fault (HEAF) non-suppression probability (NSP) instead of the electrical panel NSP. The HEAF NSP was not included in the current Appendix W results. Has the HEAF NSP been incorporated into the updated PRA? If not, provide the CDF, Δ CDF, LERF, and Δ LERF arising from using the HEAF NSP instead of the electrical panel NSP in addition to the new Attachment W.

RESPONSE:

The insights provided from the HEAF sensitivity study as provided in response to PSL RAI PRA 01.m.01.01 (refer to FPL Letter L-2015-104, dated April 1, 2015) remain applicable. None of the updates to the fire PRA (refer to Enclosure 7 of this letter) have impacted any of the HEAF scenarios

PSL RAI PRA S01 (d)

During a conference call on June 29, 2015, the licensee stated that some newly identified variances from deterministic requirements and lack of breaker coordination failures will be added to the LAR and incorporated into an updated PRA. No other changes to the LAR or the PRA were identified. The licensee further stated that they intend to submit revised Attachments C, G, S, and W. After a review of the previously submitted information, the NRC staff has concluded that the following information is also needed to complete the review of the updated PRA.

d) PRA RAI 19 .01 noted that fire initiating event frequencies from Supplement 1 to NUREG/CR-6850 were used. Supplement 1 directs that the use of the Supplement 1 frequencies should be accompanied by a sensitivity study using the frequencies provided in Table 6-1 of NUREG/CR-6850. The response to PRA RAI 19.01 (letter dated April 1, 2015) states that the risk increase estimates in the previous sensitivity study exceeded the acceptance guidelines for some fire areas but that these increases are offset by the risk reduction associated with risk-reduction modifications. Please re-evaluate this sensitivity study with the updated PRA. If the new sensitivity risk results could exceed the acceptance guidelines (i.e., affect the decision being made) even with the risk reductions, discuss additional defense-in-depth measures that can be applied to scenarios within those fire areas that result in the acceptance guidelines being exceeded.

RESPONSE:

The sensitivity analysis measuring the impact of using NUREG CR/6850 bin frequencies instead of NUREG CR/6850 Supplement 1 has been updated. The results of this sensitivity are provided below.

Table 1
Unit 1 6850 Sensitivity

Case	6850, Supplement 1						6850					
Level	Var CDF	Comp CDF	Delta CDF	Var LERF	Comp LERF	Delta LERF	Var CDF	Comp CDF	Delta CDF	Var LERF	Comp LERF	Delta LERF
Total	4.60E-05	2.29E-05	2.14E-05	7.97E-06	4.36E-06	3.37E-06	6.79E-05	3.78E-05	2.78E-05	1.19E-05	7.54E-06	3.99E-06
% change	-	-	-	-	-	-	48%	65%	30%	49%	73%	18%

Table 2
Unit 2 6850 Sensitivity

Case	6850, Supplement 1						6850					
Level	Var CDF	Comp CDF	Delta CDF	Var LERF	Comp LERF	Delta LERF	Var CDF	Comp CDF	Delta CDF	Var LERF	Comp LERF	Delta LERF
Total	4.70E-05	2.63E-05	1.10E-05	7.30E-06	5.01E-06	1.92E-06	7.90E-05	4.72E-05	1.58E-05	1.29E-05	9.19E-06	3.06E-06
% change	-	-	-	-	-	-	**68%**	**79%**	**44%**	**77%**	**83%**	**59%**

The above sensitivity results, for use of NUREG/CR-6850 Supplement 1 versus Rev. 0 of NUREG/CR-6850 , demonstrate that the total CDF results (Variant Case CDF, "Var CDF", in above table) will remain within RG 1.174 limits (including non-Fire hazard contribution). The areas in which the guidelines are exceeded for delta CDF and delta LERF for both Units 1 and Unit 2 are offset by non-VFDR related plant modifications (see the updated LAR Attachment W, Enclosure 7).

The increase in PSL U1 and U2 total LERF ((Variant Case LERF, "Var LERF", in above table) is primarily driven by the increase of risk for fires in the MCR (2.44E-06/yr of a total increase of 3.93E-06/yr for Unit 1 and 2.54E-06/yr of a total increase of 5.6E-06/yr for the Unit 2 control room). The increase in LERF for U1 and U2, caused by the use of NUREG/CR-6850 FIF bins, is considered to be offset by the significant recovery actions relied upon for defense-in-depth (DID) for this area. Recovery actions for DID credited for the control room include auxiliary feedwater related actions, charging system actions to control RCS within pressurizer level indication, credit for actions to trip RCPs and close seal leakoff (actions not explicitly credited in control room CCDP 1.0 scenarios due to tight time constraints, however, the recovery actions for DID will have some probability of success and will reduce overall risk). These actions which will reduce core damage probability will result in a corresponding reduction in LERF risk.

Enclosure 2 to L-2015-211

St. Lucie LAR Change Summary

St. Lucie LAR Change Summary

The following is a description of the changes made to the St. Lucie LAR based on impacts from the recently discovered CVCS and power panel coordination issues that have been incorporated in the station's Appendix R Safe Shutdown Analysis (SSA) since the development of the NFPA 805 LAR. For clarity and ease of reading, the revision of the SSA in effect at the time of the NFPA 805 LAR development will be referred to as the "previous SSA" and the current SSA will be referred to as the "revised SSA"

Attachment C Table C-1 (refer to Enclosure 3)

Additional Identified CVCS Failures

Additional VFDRs were added to each Unit due to additional failures identified within the Chemical and Volume Control System (CVCS) associated with the revised SSA.

The previous SSA had the Pressurizer level input cables to the automatic start circuit as required cables but the failure mode was loss of automatic starting of the affected charging pump. The previous SSA did not identify that loss of power to the relays that interlock the charging pumps and level signals would also start the charging pumps. Failure of these cables could start additional charging pumps – either the selected backup pump or all the charging pumps on that Unit.

Failures of these cables in the Fire PRA cause spurious starting of the charging pumps and therefore, the Fire PRA had the risk impact include in the variant case. Since the previous SSA did not identify this specific failure a VFDR was not originally identified in the LAR.

As a result of the revised SSA, the variant case risk was not impacted but the compliant case was impacted since the failure that caused the spurious start of the charging pumps was not eliminated when creating the compliant case.

This issue has been resolved by adding the appropriate VFDRs in the affected fire areas and eliminating the failure in the compliant case resulting in a new delta CDF and a new delta LERF for the impacted fire areas as shown in the revised Attachment W Tables W-6 and W-7.

Unrecognized MSO Failure

The MSO Expert Panel identified several MSOs involving transfer of water from the Refueling Water Storage Tank (RWT) to the Containment Sump via spurious starting of pumps and spurious opening of valves. These were incorporated into the Fire PRA but one was missed from incorporation into the previous SSA.

A spurious start of a Low Pressure Safety Injection Pump (LPSI) and the spurious opening of a valve separating the LPSI system from the Containment Spray system on Unit 1 was not incorporated into the previous SSA.

This resulted in additional of VFDRs to impacted fire areas. Since the failures had already been included in the Fire PRA, the variant case was not impacted but the failure was not originally eliminated from the complaint case. This impacts the delta CDF and delta LERF of the affected fire areas as shown in the revised Attachment W Tables W-6 and W-7.

Separation of Spurious Pump Start Failures

The previous SSA had recognized that spurious engineered safety feature actuation signals (ESFAS) could start pumps (HPSI, LPSI, and CS) that would require operator manual actions to mitigate. However, failures to the pump control cables could directly cause a spurious start of a pump requiring the same operator manual action to mitigate. In the SSA these failures for the Containment Spray pumps were combined but should have been shown separately. The SSA was revised to show direct control cable failures separately from spurious ESFAS signals for the Containment Spray pumps. This added VFDRs for the Containment Spray pumps in selected areas. There was no impact on risk due to this change.

FPL Letter L-2014-109 Changes

FPL Letter L-2014-109 (120 day RAI responses) made changes to Attachment C Table C-2 and Attachment G. However, a markup of Attachment C Table C-1 was not provided with that letter. The mark up of Attachment C Table C-1 now includes the conforming changes made to Attachment C Table C-2 and Attachment G by FPL letter L-2014-109.

Unit 2 Changes due to Additional Circuits Analysis

The revised Unit 2 SSA includes additional circuit analysis that eliminated various VFDRs. These included the following:

- The Steam Generator Pressure input to the Atmospheric Dump Valve (ADV) control cannot cause a spurious opening or closing of the ADV since by Technical Specification the control switches are maintained in manual while at power. The only way for the pressure signal to impact valve position would be for a failure to the cable that has the manual/automatic conductors associated with the switch contacts. However, that cable also has the conductors for the open and close signals which impact the ADV position regardless of the pressure signal input. Therefore, the VFDRs caused solely by the pressure signal input failures were eliminated.
- Unit 2 Fire Area 2D recognizes that the Containment Spray Actuation Signal is an energize to actuate signal and that the only fire induced failures in this fire area would cause a loss of power to the affected circuits. There are no cables that would spurious start the Containment Spray pumps in this fire area. Therefore, this VFDR was eliminated.
- Correction of a cable routing error with respect to valve V3664 in Fire Area 2I. The result is changing a cold shutdown VFDR from V3664 to V3444.
- For Unit 2, control actions were identified to mitigate spurious starting of the LPSI pumps, Containment Spray Pumps, and spurious opening of valves to transfer water from the RWT to the Containment Sump. Containment isolation valves MV-07-3 and MV-07-4 were added to the analysis. This eliminated VFDRs for the LPSI and CS pumps where these valves were available to be closed from the control room.

Power Panel Coordination Issues

There were no changes to Attachment C Table C-1 as a result of coordination issues. Either the issue was resolved by a modification or there was an existing Appendix R analysis that showed no operator manual actions required for Appendix R (therefore no VFDRs) [impacts Fire PRA see Attachment W Tables W-6 and W-7 below]

Attachment G (refer to Enclosure 4)

Additional Identified CVCS Failures

The additional VFDRs added to Attachment C Table C-1 resulted in additional Defense-In-Depth (DID) actions. Recovery of charging at St. Lucie is considered a DID action. Therefore changes to the VFDRs that affect charging result in additional DID actions.

Corrections to Action Descriptions

- Fire Area 1B: The original LAR in Attachment G incorrectly copied the action description for the cable spread room (Fire Area 1B) from Fire Area 1A for VFDR-1B-050. This has been corrected with no impact to the Fire PRA.
- Fire Area 1C: The action for tripping the 1C Charging pump included actions to take if the breaker was inaccessible. However, for this fire area the breaker is always accessible and therefore the contingency actions for accessibility are not required. In addition, extraneous information (copied from the SSA) was deleted since it represented notes for the SSA and has no impact to the actual action description.
- Fire Area 2F: The action associated with VFDR-2F-261 was inadvertently copied from another VFDR. This was corrected with no impact on the Fire PRA.

FPL Letter L-2014-109 Changes

The markup to Attachment G for L-2104-109 was expanded to clearly show the association with the component and VFDR. This is an administrative change only. In addition, FPL Letter L-2014-109 added risk required actions for VFDRs VFDR-2B-121, VFDR-2B-123, and VFDR-2B-127. The markup to Attachment G added this to LAR page G-52. However, the markup inadvertently left out VFRD-2B-128 and did not clearly show that the remaining actions associated with these VFDRs remained as DID actions. This has been corrected in this letter by showing which part of the actions for VFDR-2B-121, VFDR-2B-123, VFDR-2B-127, and VFDR-2B-128 are required for risk and which are required for DID.

FPL Letter L-2014-056 Changes

FPL Letter L-2014-056 clarified PCS and DID actions on LAR page G-95. These changes have been included in Enclosure 4 on page 104 of 120 and do not represent a change since the RAI response

Unit 2 Changes due to Additional Circuits Analysis

The changes to the circuit analysis described above (refer to the description of changes to Attachment C) for the ADV and the availability of control room actions to mitigate a spuriously started Containment Spray pump also impacted Attachment G by removing the eliminated actions.

Attachment S Table S-1 (refer to Enclosure 5)

Power Panel Coordination Issues

The coordination calculations for 120V AC and 125V DC used assumptions that while acceptable under Appendix R could impact the Fire PRA. To achieve coordination and match the Fire PRA assumptions (the Fire PRA assumes all circuits are coordinated unless otherwise analyzed) several power panels are being modified to achieve coordination between the branch circuits and the feeder breaker to the power panel. This is accomplished by adding isolation fuses to prevent a fault on a branch circuit from tripping the feeder breaker to the panel. The following power panels are identified to be modified:

- Unit 1 power panel PP-101
- Unit 2 power panels PP-202, PP-220, and PP-221.

Specific 125VDC Busses are not coordinated with their load breakers. This will be resolved by changing breaker settings/sizes/adding fuses to achieve coordination. The affected components are:

- Unit 1: 125V DC bus 1A and 1B feeder breakers to 125V DC busses 1AB and 1AB-1 load breakers.
- Unit 2: 125V DC bus 2A and 2B feeder breakers to 125V DC 2AB load breakers.

Attachment W Tables W-6 and W-7 (refer to Enclosure 7)

Additional Identified CVCS Failures

The additional CVCS failures identified above had already been incorporated into the Fire PRA. The result is that the variant case was not impacted by this update but since additional VFDRs were identified, the compliant case was impacted since the failures leading to the VFDRs were not removed from the original complaint case. The compliant case was quantified including removal of the newly identified VFDRs. This results in a different compliant case result and a different delta CDF and delta LERF. This is reflected in the revised Tables W-6 and W-7.

Unrecognized MSO Failure

The MSO failures identified above had already been incorporated into the Fire PRA. The result is that the variant case was not impacted by this update but since additional VFDRs were identified the compliant case was impacted since the failures leading to the VFDRs were not removed from the original complaint case. The compliant case was quantified including removal of the newly identified VFDRs. This results in a different compliant case result and a different delta CDF and delta LERF. This is reflected in the revised Tables W-6 and W-7.

Separation of Spurious Pump Start Failures

Since the failures identified for the individual pump spurious starting were already included in the Fire PRA and existing VFDRs already included these spurious pump starts, there is no impact to Tables W-6 and W-7 for this issue.

FPL Letter L-2014-109 Changes

Changes due to this letter had already been included in the previous revision of the W-6 and W-7 tables and no additional changes are required.

Unit 2 Changes due to Additional Circuits Analysis

The changes identified above for revisions of the SSA based on additional circuit analysis result in the reduction the number of VFDRs and elimination of some DID actions. Removal of the DID actions do not impact Tables W-6 and W-7 since DID actions are not included in the risk model. The changes to the circuit analysis has not been incorporated into the Fire PRA at this time since the reduction of the number of fire induced failures will have a positive impact on risk and therefore it is conservative not to include this at this time. This will be included in a general Fire PRA update.

Power Panel Coordination Issues

For power panels that are being coordinated with modifications, there is no impact on the Fire PRA since it assumes that those panels are already coordinated. For power panels that have coordination issues and are not being modified, the risk of this lack of coordination is included in the risk analysis by associating all the load cables with the power panel such that fire induced damage to any load cable fails the entire panel. This had been done as part of the original risk analysis for the LAR for Unit 2 power panels PP-254 and PP-255. As part of this current revision, this treatment has been applied to Unit 1 power panels PP-118 and PP-119. The results of the risk analysis with lack of coordination for Unit 1 power panels PP-118 and PP-119 have been included in the update of Tables W-6 and W-7.