

U. S. Nuclear Regulatory Commission

Attn.: Document Control Desk Washington, D.C. 20555-0001

Re: Turkey Point Unit 3 and Unit 4

Docket Nos. 50-250 and 50-251

Florida Power and Light Company's, Turkey Point Units 3 and 4, First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

References:

- 1. U.S. Nuclear Regulatory Commission, Order Number EA-12-049, Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, dated March 12, 2012 (ML12056A045)
- 2. Florida Power and Light Company's Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated February 26, 2013 (ML13072A038)

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Reference 1, an immediately effective Order to all licensees including Florida Power and Light Company's (FPL) Turkey Point Units 3 and 4. In Reference 2, FPL submitted an Overall Integrated Plan for the implementation of this Order. The Order required Licensee's to provide periodic status reports for the Overall Integrated Plan. The purpose of this letter is to provide the first six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1.

The enclosure to this letter provides the first update of milestone accomplishments since the submittal, including any changes to the compliance method, schedule, or need for relief and the basis, if any.

Should you have any questions regarding this submittal, please contact Mr. Robert J. Tomonto, Turkey Point Licensing Manager, at 305-246-7327.



I declare under penalty of perjury that the foregoing is true and correct. Executed on August 2/, 2013

This letter contains no new Regulatory Commitments and no revisions to existing Regulatory Commitments.

Sincerely,

Michael Kiley Site Vice President

Turkey Point Nuclear Plant

Enclosure

cc: USNRC Regional Administrator, Region II

USNRC Project Manager, Turkey Point Nuclear Plant

USNRC Senior Resident Inspector, Turkey Point Nuclear Plant

L-2013-249

Enclosure

Florida Power and Light Company's

Turkey Point Units 3 and 4

First Six Month Status Report for the Implementation of Order EA-12-049

Order Modifying Licenses with Regard to Requirements for Mitigation

Strategies for Beyond-Design-Basis External Events

1 Introduction

Florida Power and Light Company's (FPL) Turkey Point developed an Overall Integrated Plan (Reference 1 in Section 8), documenting the diverse and flexible strategies (FLEX), in response to Reference 2. This attachment provides an update of milestone accomplishments since submittal of the Overall Integrated Plan including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any.

2 Milestone Accomplishments

No milestone(s) have been completed since the development of the Overall Integrated Plan (Reference 1), as of July 31, 2013. However, detailed design for mechanical and electrical tie-in modifications has commenced. Additionally, the alternatives analysis for the storage building is being finalized.

3 Milestone Schedule Status

The following provides an update to Attachment 3 of the Overall Integrated Plan (Reference 1). It provides the activity status of each item, and whether the expected completion date has changed. The dates are planning dates subject to change as design and implementation details are developed.

The following milestone target completion dates have been adjusted or added:

- Order Equipment, (procurement phase 1), with a target completion date of June 2013 has been adjusted to June 2014.
 - BASIS: This milestone is for both Units 3 and 4, with Unit 3 having a completion date of fall of 2015. Most of the equipment for Unit 3 will be ordered in the second quarter of 2014. Delaying ordering of equipment is required to coordinate with finalizing designs and feedback from NRC Staff reviews of the OIP submittal. In addition, some equipment to be used in Phase 2 of the strategies is similar to phases 2 and 3 equipment to be provided by the regional response center (RRC). As such coordination with the RCC activities to match the equipment as much as possible is being pursued.
- Unit 3 Implementation Complete with a target completion date of May 2015 has been adjusted to November 2015.

BASIS: This milestone was based on a spring outage for Unit 3 since some of the modifications require a refueling outage to implement. The spring 2015 outage has been re-scheduled to a fall 2015 outage because of an extended power uprate outage that ended in late 2012.

New Milestones

An activity to complete Analysis Supporting FLEX Strategies, which are listed in Reference 1, Attachment 3, has been added along with an activity to "Perform a Final Walkthrough Validation." These activities will ensure that all FLEX response actions can be successfully performed. This will be done by Feb 2015.

The revised milestone target completion dates do not impact the order implementation date.

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Submit 60 Day Status Report	Oct 2012	Complete	N/A
Submit Overall Integrated Plan	Feb 2013	Complete	N/A
Submit 6 Month Updates:			
Update 1	Aug 2013	Complete	N/A
Update 2	Feb 2014	Not Started	N/A
Update 3	Aug 2014	Not Started	N/A
Update 4	Feb 2015	Not Started	N/A
Update 5	Aug 2015	Not Started	N/A
Update 6	Feb 2016	Not Started	N/A
Update 7	Aug 2016	Not Started	N/A
Walk-through or Demonstrations:			1
Complete Analyses Supporting FLEX Strategies	Jun-2014	Started	N/A
Complete Final Time Constraint Validations	Nov-2014	Not Started	N/A
Complete Staffing Analysis (Phase 2)	Jan-2015	Not Started	N/A
Complete Final Walkthrough Validation	Feb-2015	Not Started	N/A
Modifications:			
Issue Modification Packages for Unit 3	Jun-2014	Started	N/A
Unit 3 Implementation Complete	May-2015	Not Started	Nov-2015
Issue Modification Packages for Unit 4	Jun-2015	Not Started	N/A
Unit 4 Implementation Complete	May-2016	Not Started	N/A
Storage:			1
FLEX Storage Building Completed	Mar-2015	Started	N/A
FLEX Equipment:		<u> 1,</u>	
Order Equipment (procurement phase 1)*	Jun-2013	Started	Jun-2014
Receive Equipment (procurement phase 1)*	Dec-2013	Not Started	Dec-2014
Order Equipment (procurement phases 2/3)*	Jun-2014	Not Started	Dec-2014
Receive Equipment (procurement phase 2)*	Dec-2014	Not Started	June 2015

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Receive Equipment (procurement phase 3)*	Apr-2015	Not Started	June-2015
Develop Strategies (Playbook) with RRC	Nov-2013	Started	N/A
Procedures:			· '
Issue Operations Procedure Changes including FSGs	Sep-2014	Not Started	N/A
Create Maintenance Procedures	Dec-2014	Not Started	N/A
Training:		 	
Operations Procedure Changes Training Material Complete	Sep-2014	Not Started	N/A
Develop Training Plan	Oct-2014	Not Started	N/A
Training Complete	Feb-2015	Not Started	N/A

^{*}Note phase refers to the procurement sequence of equipment to be ordered, not the FLEX Phases as described in NEI 12-06.

4 Changes to Compliance Method

Changes to Modifications:

Modifications Nos. 2 and 3

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing three new hose connection points to the Condensate Storage Tank (CST) for use during Phase 2 (Modification Nos. 2, 3 and 4). The current plans are to install two connections (primary and alternate) which are sufficient to meet NEI 12-06 guidance. Modification No. 3 which previously added a hose connection and isolation valve to the CST manway has been eliminated. Modification No. 2 previously identified adding a hose connection and valve at the AFW suction line form the CST but, due to constructability and operational concerns, the connection point has been moved to the CST overfill drain line. Modification No. 4 has not changed. The two hose connections to the CST are designated as the primary and alternate connections for filling the CST and for supplying suction to the SG FLEX pump. Each of the connections will have Y hose connections to allow use for either flow path. A revised conceptual modification sketch has been provided in Attachment 1. This change will not affect the strategy or ability to maintain core cooling and heat removal by equipment credited during Phase 2.

Modification No. 5

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing a new valve and hose connection at the SG wet layup spectacle flange (Modification No. 5). The configuration of this connection has been changed to reduce required effort when connecting a hose. A permanent tee with isolation valve and hose connection will be added downstream of the spectacle flange. This configuration may change once walkthrough demonstrations have been completed. Any changes will be identified in the next 6 month update, if required. This change will not affect the strategy or the ability to maintain core cooling and heat removal by equipment credited during Phase 2.

Modification No. 6

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing a new hose connection point to the Refueling Water Storage Tank (RWST) manway cover for use during Phase 2 (Modification No. 6). Due to constructability and operational concerns, the current plans are to install a hose connection and isolation valve at the RWST overfill drain line. A revised conceptual modification sketch has been provided in Attachment 2. This change will not affect the strategy or ability to provide reactor coolant system inventory makeup by equipment credited during Phase 2.

Modification No. 7

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing a new hose connection point to the Intake Cooling Water line to the A TPCW heat exchanger strainer backflush piping for use during Phase 3 (Modification No. 7). Due to constructability and operational concerns, the current plans are to install a flanged connection in each of the ICW strainer cover to both the A and B CCW heat exchanger instead of the A TPCW heat exchanger. The flanged connection will allow connection of a hose from the ICW FLEX pump. A revised conceptual modification sketch has been provided in Attachment 3. This change will not affect the strategy or the ability to maintain core cooling and heat removal by equipment credited during Phase 3.

Modification No. 8

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing a new connection point to the Spent Fuel Pool (SFP) discharge for use during Phase 2 (Modification No. 8). Due to constructability and operational concerns, the current plans are to install an isolation valve and hose connection in the SFP emergency pump suction line. The purpose of this connection is to allow adding water to the SFP in the event high dose rates do not allow approaching the pool with a hose. Either the suction or discharge connections to the SFP can provide this capability. A revised conceptual modification sketch has been provided in Attachment 4. This change will not affect the strategy or the ability to provide makeup to by equipment credited during Phase 2.

Modification No. 9

The Overall Integrated Plan submittal (Reference 1, Attachment 4) included a sketch showing new connection points to both trains of the 4KV and 480V busses for each unit from two 100% capacity FLEX diesel generators during Phase 2 and Phase 3 (Modification No. 9). For the 480V busses, the revised connections will include a connection to each safety bus from one of the FLEX diesel generators instead of both. The new 480V connections for the 480V load centers will be protected from all hazards for Class 1 equipment. For the 4KV busses, a dedicated spare breaker will be used on each train to provide the tie-ins for the Phase 3 equipment. The revised configuration meets NEI 12-06 guidance since all required electrical distribution equipment including batteries and battery chargers are designed to

Class 1E requirements, are located in a Class 1 structure, and a single train of AC power provides adequate power for baseline coping capability. Therefore, it is reasonable to expect all such equipment to remain functional/available after a BDB external event and it will still provide diverse capabilities since two separate trains can be re-powered. Primary electrical connections will be provided on the line side of one train, the train designated as protected to meet Appendix R safe shutdown requirements (Train "B"), with the alternate electrical connections provided on the line side of the opposite train (Train "A"). This strategy will be applied to both the 4KV and 480V connections. Note; this is a change in strategy from the original submittal in that the alternate connections was going to be provided on the load side of the Phase 2 equipment. A revised conceptual modification sketch has been provided in Attachment 5. This change will not affect the ability to provide electrical power to essential equipment credited during Phases 2 and 3.

Modification No. 12

The Overall Integrated Plan submittal (Reference 1, Attachment 4) described adding shallow wells to provide a minimum of 600 gpm (Modification No. 12). After additional chemical analysis of shallow well water, deep wells will be provided to obtain adequate water chemistry. This change will not affect the strategy or ability to maintain core cooling, heat removal or RCS makeup by equipment credited during Phase 2 and Phase 3.

5 Need for Relief/Relaxation and Basis for the Relief/Relaxation

FPL expects to comply with the order implementation date and no relief/relaxation is required at this time.

6 Open Items from Overall Integrated Plan and Draft Safety Evaluation

The following tables provide a summary of the open items documented in the Overall Integrated Plan or the Draft Safety Evaluation (SE) and the status of each item. Completion dates for the Overall Integrated Plan pending actions remain unaffected

No.	Overall Integrated Plan Open Item (Pending Actions)	Target Completion Date	Status
1	Perform a revised analysis of the containment structure once the detailed performance parameters for the shutdown seals are obtained and using more realistic heat input parameters.	Jun 2014	Not Started
2	A hydraulic analysis will be performed to determine the minimum requirements of the portable FLEX pumps and connection point sizes. The outputs of this analysis will include a minimum flow and discharge pressure for each pump.	Jun 2014	Started

No.	Overall Integrated Plan Open Item (Pending Actions)	Target Completion Date	Status
3	A hydraulic analysis will be performed to support the ability to heat up from Mode 5 to a condition where the AFW pumps are removing decay heat via the SGs.	Jun 2014	Not Started
4	Heat loads will be removed via the SFP Cooling heat exchangers, RHR heat exchangers, and Containment Coolers. Analysis will be required to determine the minimum requirements for UHS RRC pump.	Jun 2014	Not started
5	Analysis will be required to determine fuel requirements of FLEX equipment. This analysis will determine requirements and capabilities of onsite FLEX portable pumps and diesel generators for Phase 2.	Jun 2014	Started
6	A determination of the "drop off" location from the RRC is pending. Once selected, the path to the site will be reviewed.	Nov 2013	Not Started
7	An analysis will be performed to establish the timeline for SI or RWST injection for Modes 5 & 6	Jun 2014	Not Started
8	Complete a final assessment of haul paths and staging areas to confirm access including review for soil liquefaction	Sept 2014	Not Started
9	The generic WCAP guidance recommends that a site-specific evaluation be performed once the seal design is completed to validate that the cooldown and depressurization time is supported.	Jun 2014	Not Started

Draft Safety Evaluation Open Item	Status
Draft Safety Evaluation has not been received yet.	N/A
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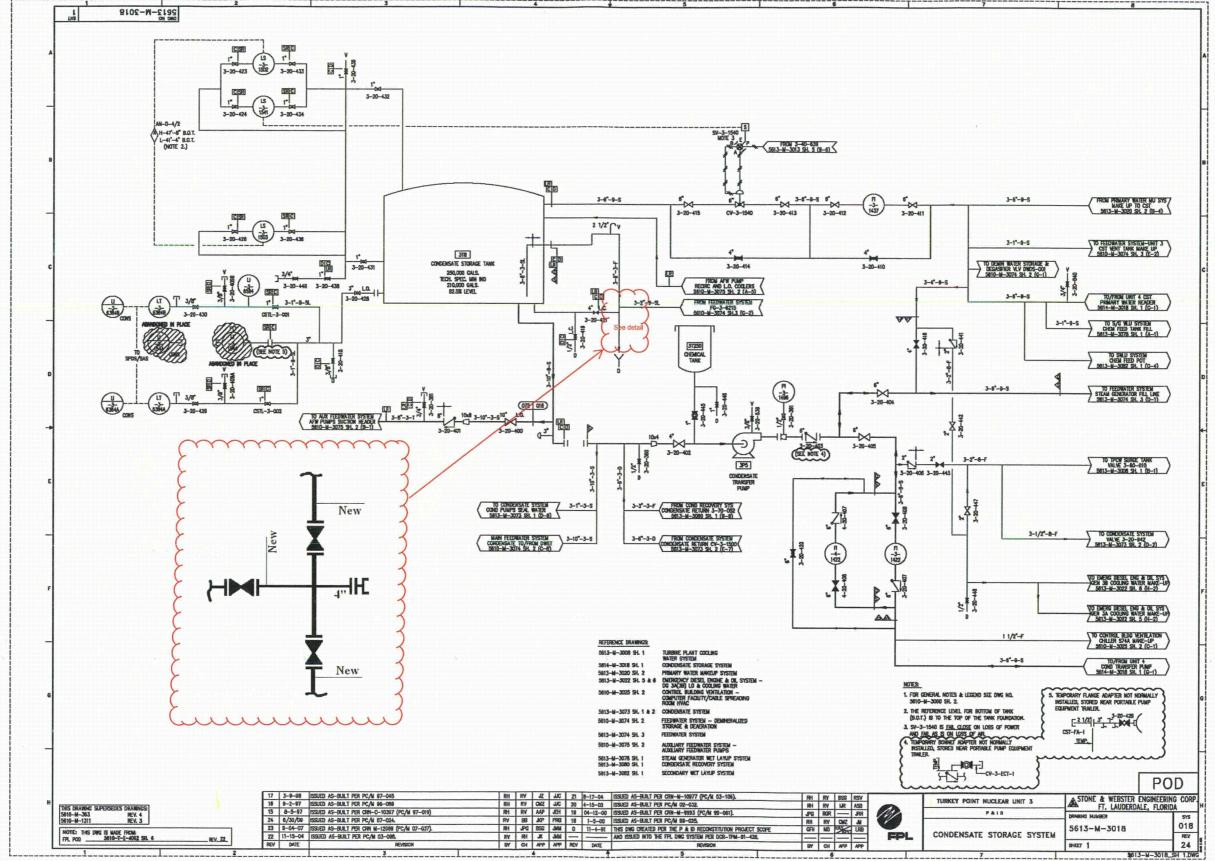
7 Potential Draft Safety Evaluation Impacts

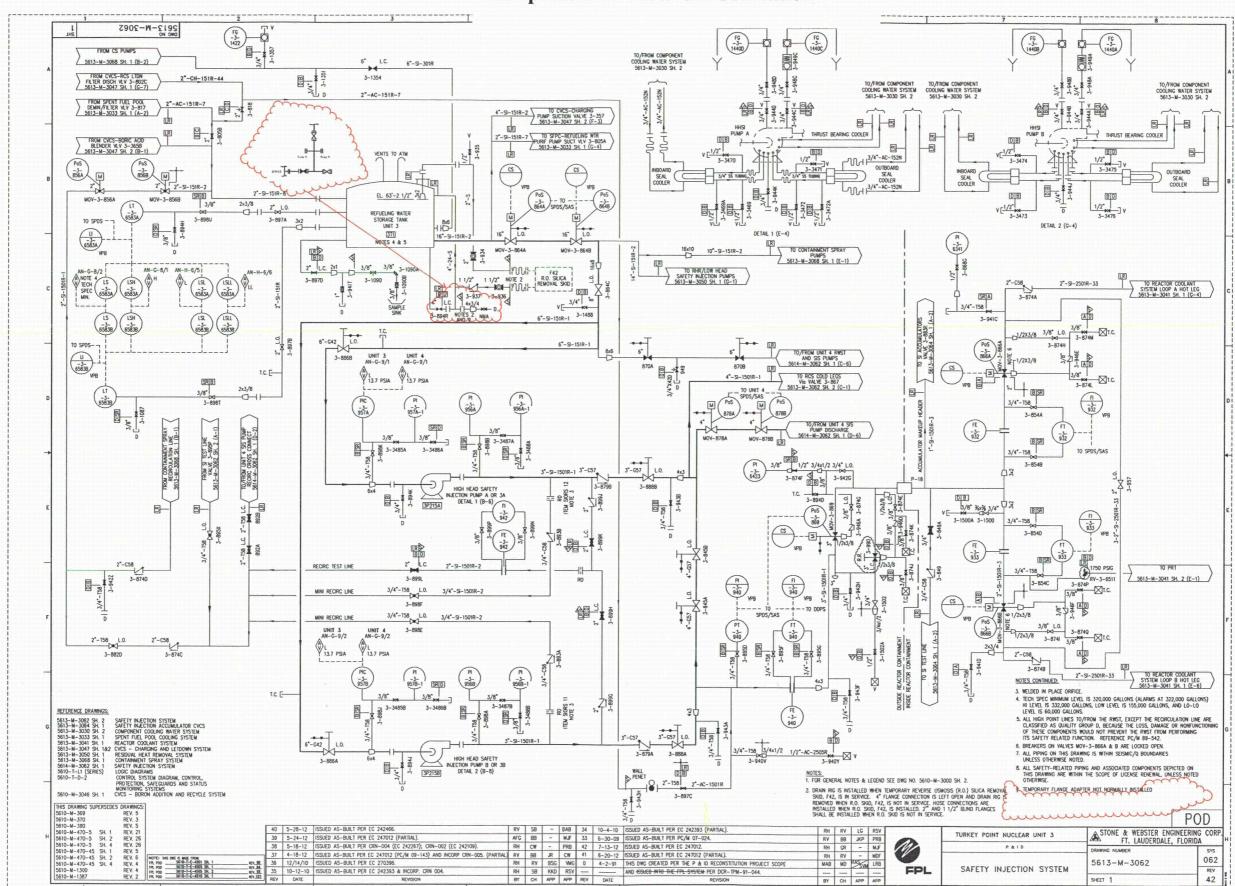
At this time, there are no changes identified that could potentially impact the Draft Safety Evaluation.

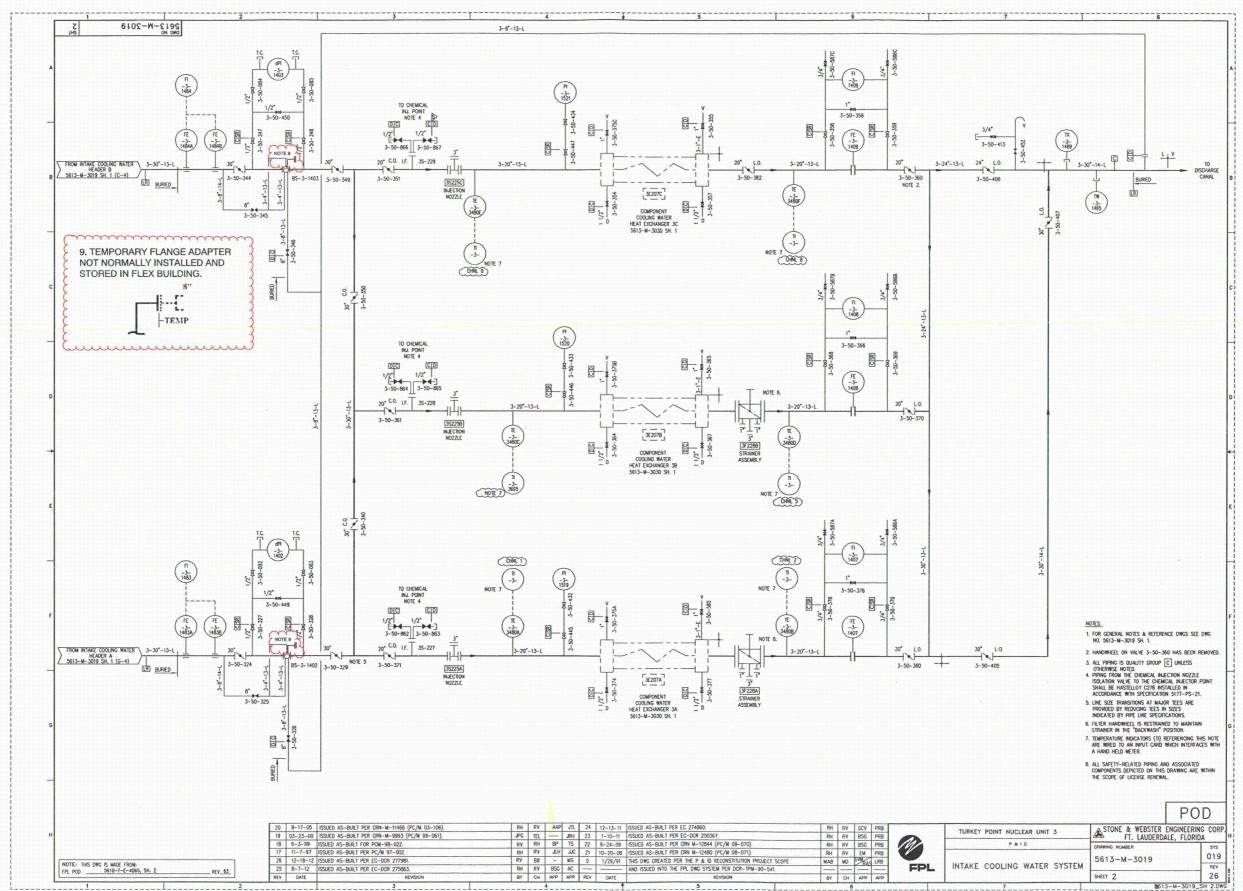
8 References

- Florida Power and Light Company's Overall Integrated Plan in Response to March 12, 2012
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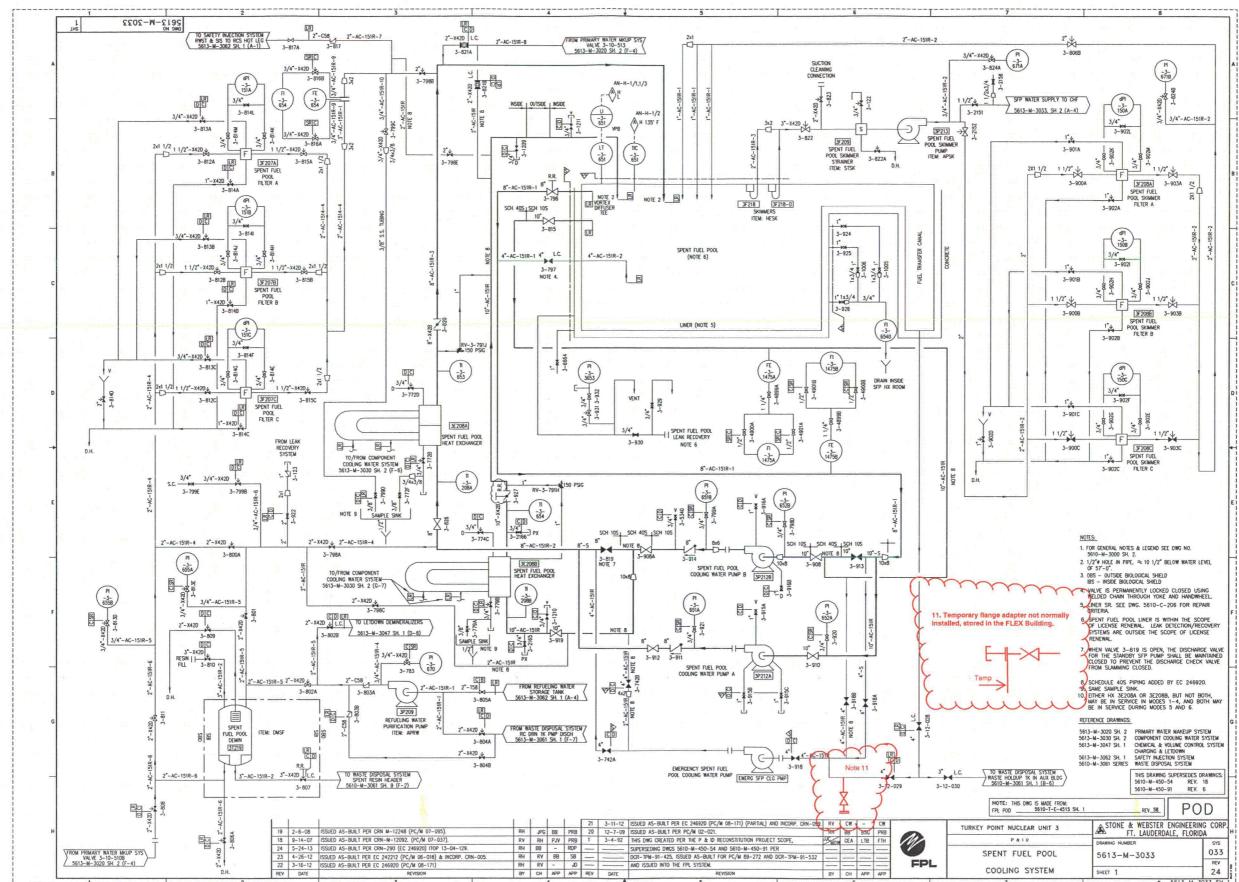
Attachment 1 Conceptual Sketches and Modification

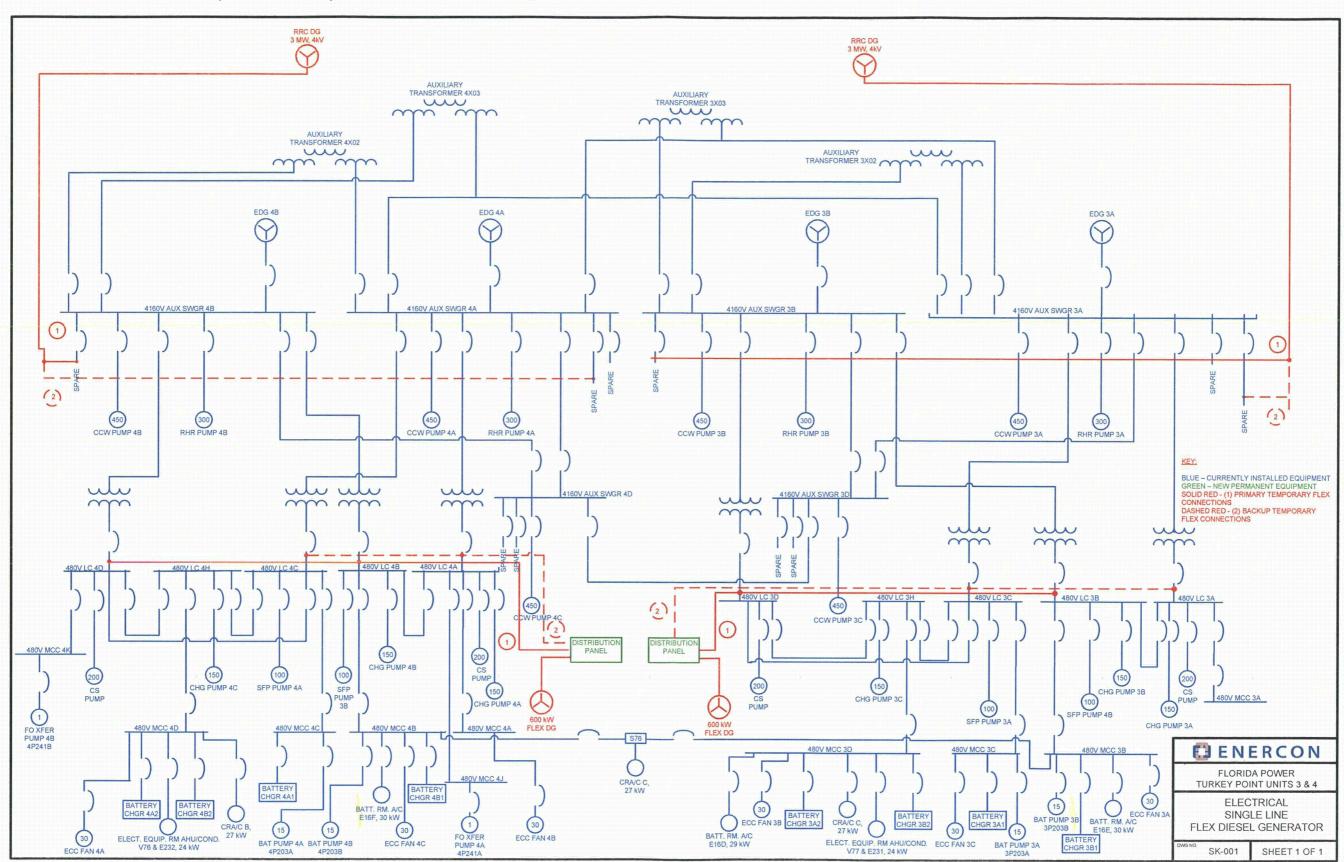






Attachment 4
Conceptual Sketches and Modifications





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