August 27, 2014

L-2014-274
10 CFR 2.202

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389

Florida Power & Light (FPL)/St. Lucie's Third Overall Integrated Plan 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. NRC Order Number EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events dated March 12, 2012, Accession No. ML12054A736.
2. NRC Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 0, dated August 29, 2012, Accession No. ML12229A174.
3. NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August, 2012, Accession No. ML12242A378.
4. FPL Letter L-2012-385 dated October 25, 2012, FPL's Initial 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), dated October 25, 2012, Accession No. ML12300A421.
5. FPL Letter L-2013-084 dated February 28, 2013, Florida Power & Light (FPL)/St. Lucie'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) , Accession No. ML13063A020.
6. FPL Letter L-2013-192 dated June 18, 2013, Florida Power & Light (FPL)/St. Lucie'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), Accession No. ML13179A184.
7. FPL Letter L-2013-254 dated August 28, 2013, Florida Power & Light (FPL)/St. Lucie's First Overall Integrated Plan 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), Accession No. ML13242A274.

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8. FPL Letter L-2014-063 dated February 26, 2014, Florida Power & Light (FPL)/St. Lucie's Second Overall Integrated Plan 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), Accession No. ML14064A192.

On March 12, 2012, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an order (Reference 1) to Florida Power & Light (FPL). Reference 1 was immediately effective and directs FPL/St. Lucie to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an Overall Integrated Plan by February 28, 2013. The NRC Interim Staff Guidance (ISG) (Reference 2) was issued August 29, 2012 which endorses industry guidance document NEI 12-06, Revision 0 (Reference 3) with clarifications and exceptions identified in Reference 2. Reference 3 provides direction regarding the content of this Overall Integrated Plan.

Reference 4 provided the FPL/St. Lucie initial status report regarding mitigation strategies, as required by Reference 1. Reference 5 provided the FPL/St. Lucie Overall Integrated Plan pursuant to Section IV, Condition C.1, of Reference 1. Reference 6 informed the NRC that St. Lucie was no longer pursuing reactor coolant pump (RCP) seal package modifications as part of the FLEX strategy. References 7 and 8 provided the FPL/St. Lucie first and second six-month Overall Integrated Plan status report.

The purpose of this letter is to provide the third six-month Overall Integrated Plan status report. The information in the enclosure is based on conceptual design information that is current as of this letter. As design details and associated procedural guidance are finalized, additional information, as well as revisions to the information contained in the enclosure to this letter, will be communicated to the NRC in the 6-month Integrated Plan updates as required by Reference 1.

This letter contains no new regulatory commitments.

If there are any questions regarding this submittal, please contact Eric Katzman, St. Lucie Licensing Manager, at (772) 467-7748.

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

Executed on August 27 , 2014.

Respectfully submitted,

(ACTING)
Joseph Jensen
Site Vice President
St. Lucie Plant

JJ/KWF

cc: USNRC Regional Administrator, Region II
USNRC Senior Resident Inspector, St. Lucie Units 1 and 2

Enclosure:

Third 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

Third 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 (FPL) developed an Overall Integrated Plan (Reference 1 in Section 8), documenting the diverse and flexible strategies (FLEX), in response to Reference 3 for the St. Lucie plant. 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.

To simplify review of impacts the six-month updates have on the original Overall Integrated Plan (Reference 1), this third six-month update has been formatted as a revision to the second six-month update (Reference 14), thus keeping all updates in one document; changes since the second six-month update are reflected via revision bars in the right-hand margin.

2 Milestone Accomplishments

The following milestone(s) have been completed since the development of the Overall Integrated Plan (Reference 1). Milestone accomplishments are current as of August 11, 2014.

- Submittal of First 6-Month Status Report, August 2013 (Reference 6)
- FLEX Strategy (Preliminary) Walkthrough Demonstration
- Submittal of Second 6-Month Status Report, February 2014 (Reference 14)
- Submittal of Third 6-Month Status Report, August 2014 (This Document)

3 Milestone Schedule Status

The following provides an update to Attachment 2 of the Overall Integrated Plan. 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. An additional milestone for FLEX Strategy Walkthrough Demonstration has been added per NEI template revision. 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	
Submit Overall Integrated Plan	Feb 2013	Complete	
Submit 6 Month Updates:			
Update 1	Aug 2013	Complete	
Update 2	Feb 2014	Complete	
Update 3	Aug 2014	Complete	
Update 4	Feb 2015	Not Started	

Milestone	Target Completion Date	Activity Status	Revised Target Completion Date
Update 5	Aug 2015	Not Started	
FLEX Strategy Evaluation	Feb 2014	Started	February 2015
FLEX Strategy Walkthrough Demonstration	Feb 2014	Complete	
Perform Staffing Analysis	Oct 2014	Started	
Modifications:			
Unit 1 Implementation Outage	Mar 2015	Not Started	
Unit 2 Implementation Outage	Nov 2015	Not Started	
Storage:			
Storage Implementation	Mar 2015	Not Started	
FLEX Equipment:			
Procure On-Site Equipment	Oct 2014	Started	
Procedures:			
Create Site-Specific FSGs	Mar 2014	Started	September 2014
Create New/Revisions to OPS Procedures	Mar 2014	Started	October 2014
Create Maintenance Procedures	Mar 2014	Started	October 2014
Training:			
Develop Training Plan	June 2014	Complete	
Training Complete	Mar 2015	Not Started	
Unit 1 FLEX Implementation	Mar 2015	Not Started	
Unit 2 FLEX Implementation	Nov 2015	Not Started	
Full Site FLEX Implementation	Nov 2015	Not Started	

4 Changes to Compliance Method

4.1 RCP Seal Modification

The Reference 1 (page 35 of 102) FLEX response indicated St. Lucie would modify the seals for the reactor coolant pumps of both units to include Flowserve Abeyance seal stages. Reference 2 revised the St. Lucie FLEX strategy to maintain the current Flowserve N-9000 RCP seal configuration without making a Flowserve Abeyance seal modification. The existing St. Lucie seal configuration is consistent with the N-9000 RCP seal configuration evaluated in WCAP-17601-P, "Reactor Coolant System Response to the Extended Loss of AC Power Event for Westinghouse, Combustion Engineering and Babcock & Wilcox NSSS Designs" (Reference 5) and with the approaches adopted by other Combustion Engineering NSSS plants that currently utilize the Flowserve N-9000 seal. Note that both St. Lucie units have excess flow check valves in the RCP controlled bleed off (CBO) lines and, additionally, have fail closed isolation valves to isolate the CBO leakage pathway. Station Blackout Emergency Operating Procedures, have an early positive step to isolate the CBO leak path on loss of seal cooling; these procedures will be revised to require that isolation within 10 minutes post event – see Pending Action 73A.

As part of the revised RCP seal approach, St. Lucie will initiate the reactor coolant system cooldown to a steam generator pressure of 120 psia in a 2-6 hour timeframe as opposed to the 10-14 hour timeframe originally indicated in Reference 1. This action is compliant with WCAP-17601-P and eliminates the deviation previously indicated within Reference 1 Attachment 1B, NSSS Significant Reference Analysis Deviation Table.

4.2 Condenser Makeup Lines

The Reference 1 FLEX response (page 22 of 102) stated that non-seismic condenser makeup lines from the CST would be seismically qualified to provide an additional qualified water inventory for hot standby and cooldown. In a seismic scenario, the qualified contents of the two CSTs and two RWTs will be available to provide approximately 120 hours of Phase 2 coping time. There is reasonable assurance that volumes of one or more non-qualified tanks may also be available. Entry into Phase 3 shutdown cooling (SDC) is expected well before use of makeup of seawater from the Ultimate Heat Sink would be anticipated. Accordingly, the current FLEX strategy does not include a modification to seismically qualify the condenser makeup lines.

4.3 Mechanical Connections

The St. Lucie FLEX strategy for making mechanical system connections has evolved from that indicated in Reference 1 response figures to be consistent with NEI 12-06 guidance (Reference 4). Secondary connections may require reconfiguration (e.g., removal of valve bonnet or disassembly of a flanged pipe joint) if validated that time and resources are reasonably available to support the reconfiguration. Location of the connection points provide reasonable assurance that at least one connection will be available for all applicable hazards. Refer to attached revised mechanical connection Figures 11, 12 and 14 for the latest changes.

4.4 Electrical Connections

The St. Lucie FLEX strategy for making electrical system connections has evolved from that indicated in the Reference 1 response figures to be consistent with NEI 12-06 guidance (Reference 4). Refer to attached revised electrical connection figures; final versions will be provided in a future six-month update. Note the 480 volt connections will now be made using procedurally controlled breakers rather than using transfer switches.

Question 25 of audit document Order EA-12-049 Mitigation Strategies, Overall Integrated Plan Regulatory Audit Questions, St. Lucie 1 & 2, Rev. 1, Dated October 30, 2013, questioned the St. Lucie FLEX strategy for isolation of Class 1E Electrical equipment from portable/FLEX equipment. The FPL response was to provide a double isolation scheme with appropriate coordinated current interrupting devices. In lieu of the double isolation concept, FPL has decided that during normal operation, these new breakers will be racked out and locked open with springs discharged. Under this arrangement, isolation between the Class 1E Electrical equipment and portable/FLEX equipment is maintained.

In the same question regarding prevention of multiple sources powering the electrical buses, the strategy provided was that for Phase 3, the scheme would rely on electrically interlocked breakers of the incoming feeder breakers with the FLEX circuit breaker such that both breakers must be OPENED before the FLEX circuit breaker can be closed. The present strategy has evolved to having all the connections for FLEX power connection and breaker positioning be procedurally controlled. This strategy has evolved due to the less restricting time frame for Phase 3 coping.

4.5 Boration Requirements for Shutdown Margin

The Reference 1 FLEX response (page 37 of 102) discussed boration requirements for shutdown margin.

FPL has adopted the position expressed by the NRC staff regarding the boron mixing issue for PWRs (Reference 7) – see Pending Action 17 and Open Item 3.2.1.8.A in Section 6. The NRC letter states that the NRC staff has reviewed the information submitted to date and concluded that use of the industry approach documented in Reference 8 is acceptable with clarifications listed in the letter. FLEX guidelines will address sub-criticality for Phase 1/2 (300°F) and Phase 3 (50°F) including sources and timing for adding borated water. Guidelines will include monitoring of Thot and Tcold to ensure single phase Natural Circulation ΔT conditions exist prior to adding boron and the 1 hour mixing delay is included prior to entering conditions requiring additional boration

4.6 RRC LUHS Pump

The Reference 1 FLEX response (page 68 of 102) indicated a pump would be provided from the Regional Response Center (RRC) to replace the function of the Intake Cooling Water Pumps due to the Loss of Ultimate Heat Sink (LUHS) event. The design point of the SAFER RRC pump is 5000 gpm at 150 psi. The LUHS Pump criteria mentioned in Reference 1 (page 72 of 102; 7162 gpm, 90 psi) is altered to align with SAFER provided equipment. The nominal flow rate of 5000 gpm is adequate for Shutdown Cooling in the timeframe for entry some 72-120 hours after shutdown. The RRC generic pump has inadequate suction lift for the intended deployment of the RRC pump on the intake structure deck. An RRC supplied diesel/hydraulic driven suction booster pump will be used to provide the required lift capability. This pump combination will allow water to be drawn from the intake structure downstream of the traveling water screens (non-seismic) to address debris concerns in a hurricane scenario. A backup plan will locate the floating booster pumps within the intake canal.

4.7 Makeup Water Sources

The St. Lucie FLEX makeup water strategy has evolved from that indicated in the Reference 1 response crediting two Condensate Storage Tanks (CSTs) and one Refueling Water Tank (RWT – borated water source). The current strategy is consistent with NEI 12-06 guidance (Reference 4), including their response to FLEX Guidance Inquiry 2013-11, "Use of Raw or Untreated Water".

For a seismic based event, the current FLEX strategy credits water volumes within the CSTs and RWTs of both units. All four tanks are seismically qualified, as is the cross-connect line between the CSTs. Tank inventories above the lowest non-seismic line are not credited.

For a high wind-hurricane based event, sufficient warning time will be available to ensure site tanks, e.g., CSTs, RWTs, City Water Storage Tanks (CWSTs), Treated Water Storage Tank (TWST) and Primary Water Storage Tanks (PWSTs), are filled with water. Analysis using current licensing basis criteria indicates that water-filled tanks are qualified for a hurricane wind event. Current plant severe weather preparations procedures require all water tanks to be filled when a hurricane watch or warning has been declared. The current FLEX strategy credits the water volumes within the subject tanks for a hurricane event.

For a high wind-tornado based event, site tanks will be pre-filled, as required by administrative procedures. With respect to tornado winds and missiles, the Unit 2 CST volume is fully qualified and the Unit 1 CST volume is being qualified by analysis. The seven other major tanks (RWTs, CWSTs, TWST and PWSTs) are being qualified for many of the assumed tornado missiles. It can be reasonably assumed that many of these

tanks will survive a high wind-tornado based event based on their design, separation and intervening structures; the CWSTs, TWST and/or PWSTs should be available as secondary sources of water to provide makeup to the CSTs/RWTs during Phase 2 following a high wind missile event. An alternate makeup water strategy credits the underground water supply line from Fort Pierce Utilities (FPU), the local potable water supplier. Rather than missile protecting the single existing source from tornado, a second source will be installed and separated by greater than diameter of typical tornado path (1200 ft) with that path oriented from the west to southwest. See new Figure 23.

4.8 RWT Cross-Connect

As stated in the Reference 1 FLEX response (page 18 of 102), the Unit 1 & 2 RWTs are not currently cross-connected. The FLEX response indicated that, as required by the tank evaluations, the RWTs would be cross-connected with a seismically qualified, missile protected line to allow either RWT to be aligned for gravity flow to the SDC piping of either unit. Based on the numerous potential makeup water sources discussed above, as well as guidance provided in the NEI response to FLEX Guidance Inquiry 2013-10, "Shutdown Mode Capability Requirements for PWRs", the current FLEX strategy does not include a modification to install an RWT cross-connect line.

4.9 DC and Extended DC Load Shedding

The St. Lucie DC coping strategy has evolved from that indicated in the Reference 1 response which was to perform load shedding on both safety related batteries. The revised strategy will be to initially secure one battery, load shed/operate on the other battery and return the secured battery to service before the first battery is depleted (and then secure the first battery). This approach will improve battery margin by using the two batteries in a series operating mode. This revised strategy is still being analyzed, which includes evaluation of specific loads to be shed and any impact to required instrumentation, as well as potential impact to the Control Room heat up evaluation – see Pending Action 26A and Confirmatory Item 3.2.4.10.A in Section 6.

4.10 Steam Generator Makeup – Mode 1-4

The Reference 1 FLEX response indicated a portable pump (FLEX SG Pump) would be used to provide makeup to the steam generators as a backup source should the existing turbine driven Auxiliary Feedwater Pump fail. The pump will be sized to provide 300 gpm at 300 psi discharge (steam generator ring pressure) while drawing from the Condensate Storage Tank. Actual makeup requirements (nominally 130 gpm following cooldown) are considerably less than the 300 gpm design point. The FLEX CST Pump will be used to replenish the Condensate Storage Tank from available site water sources with ultimate backup from the intake (seawater). The FLEX SG Pump will also be capable of drafting from the intake canal at a flowrate near to, but somewhat below, the 300 gpm/300 psi design point.

4.11 Mode 5 & 6 Strategies

NEI 12-06 (Reference 4) states that the FLEX strategies are not explicitly designed for outage conditions. FPL will incorporate the supplemental guidance provided in the NEI position paper entitled "Shutdown / Refueling Modes" to enhance the shutdown risk process and procedures (see Reference 9 and 10), as well as that provided in the NEI response to FLEX Guidance Inquiry 2013-10, "Shutdown Mode Capability Requirements for PWRs". As such, pending actions associated with these modes have been closed, including those associated with boron batching alternatives since they are no longer required – both the Unit 1 and Unit 2 RWTs are now considered available to cope with an event during Mode 5 & 6.

4.12 FLEX Equipment Storage

The Reference 1 FLEX response indicated the FLEX Equipment Storage Building (FESB) will be 170' x 70' and will be capable of housing all required FLEX equipment, including required spares ("+1" equipment). The FLEX strategy has evolved to incorporate NEI 12-06 guidance (Reference 4), including their response to FLEX Guidance Inquiry 2013-07, Reasonable Protection", that spare equipment need not be stored in the FESB. The spare equipment will now be stored elsewhere on site, resulting in a smaller FESB footprint (150' x 60'). The Reference 1 FLEX response also stated the FESB will include natural ventilation to maintain temperatures within the manufacturer's recommendations; in lieu of natural ventilation, air-conditioning is now being provided, which will also limit humidity extremes inside the FESB.

Note that the Reference 1 FLEX response stated the refueling of diesel fuel oil driven equipment will be accomplished via a trailer stored in the FESB, on which will be mounted a 500-gallon tank. The tank size has been evaluated and a 1000 gallon trailer mounted tank is being procured. Gravity fill of this tank has been revised to use V17202 or one of two new redundant valves to be installed on the fill line. See new Figure 24.

4.13 Maintenance and Testing of FLEX Equipment

FPL will comply with the EPRI generic industry program for maintenance and testing of FLEX equipment as delineated in References 11 and 12.

4.14 Sequence of Events Timeline

The Reference 1 FLEX response included Sequence of Events Timelines. A new action in the Modes 1-5, SGs Available timeline for RCP Control Bleed Off isolation is added at 10 minutes to limit RCP leakage. This addresses Confirmatory Item 3.2.1.1.A. Note that these timelines are under review and may be adjusted via a future six-month update based on ongoing evaluations and development of FLEX strategies.

4.15 Instrumentation Credited for Coping Evaluations

The Reference 1 FLEX response included lists of instrumentation credited for coping evaluations supporting FLEX Strategies that Maintain Core Cooling & Heat Removal, Maintain RCS Inventory Control and Maintain Containment. Several of the instrument tags listed have been revised to provide improved sensing range and to be aligned with the power supplies that will be available under the DC Loading Shedding strategy (described in 4.9 of this attachment). Note that the parameters listed under these FLEX Strategies in the Reference 1 FLEX response are not revised.

4.16 FLEX SFP Pump Discharge

The Reference 1 FLEX response described the hardened makeup flowpath to Maintain Spent Fuel Pool Cooling as via the 2½" ICW lines on the exterior east wall of each Fuel Handling Building (FHB). In lieu of providing missile protection for these lines, an alternate missile protected flow path will be provided. The alternate path is via a new FLEX connection on the suction of one of Spent Fuel Pool Pumps on each unit. These lines and their flow paths to the Spent Fuel Pools are within the missile protected interior of the FHB's. The 2½" ICW lines remain the preferred hardpipe flowpath should they remain intact following the BDBEE. See new Figure 22.

4.17 FLEX Strategy Internal Flooding

Question 2 of audit document Order EA-12-049 Mitigation Strategies, Overall Integrated Plan Regulatory Audit Questions, St. Lucie 1 & 2, Rev. 1, Dated October 30, 2013, questioned the St. Lucie FLEX strategies address considerations for seismic hazards associated with large internal flooding sources that are not seismically robust. The FPL response was that internal flooding was a concern for access to the ECCS Pump rooms and that no AC power was required to access those rooms. In addition, internal flooding has been considered for FLEX Equipment deployment. The FLEX Strategy for RCS Makeup requires hose deployment to connections on the LPSI pump piping that is located behind the watertight doors to the ECCS Pump rooms. Access into the watertight doors is via the -0.5 ft hallways whose design bases internal flood level (from non-seismic Unit 2 Holdup Tank ruptures) is above the watertight door thresholds. To facilitate hose deployment, a modification to the watertight doorways is to be implemented to allow insertion of a flood barrier. This limits the volume of water entering the LPSI pump rooms to that between the barriers and the doors.

4.18 FLEX Equipment +1 Spares

PSL does not intent to have a complete set of spare hoses and cables but will accomplish +1 by having the greater of (1) 10% of the "N" required spares or (2) those sections of hose and cables required to replace the longest run of each hose or cable type and size needed for FLEX Strategies.

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

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

6 Pending Actions from Overall Integrated Plan and Draft Safety Evaluation

	Overall Integrated Plan Pending Actions	Status
1	Seismic re-evaluation of site and submit to NRC. Include insights in development of the FLEX integrated plan	Complete. PSL has screened out. FPL Letter L-2014-215 (Ref. 15)
2	Flooding re-evaluation of site and submit to NRC. Include insights in development of the FLEX integrated plan	Started
3	Establish location of RRC Staging Area (outside of 25 mile radius)	Complete. Staging areas have been established with SAFER review.
4	Review FESB deployment routes for liquefaction	Started
5	Determine RRC staging area location and develop deployment routes to site	Complete. Staging areas have been established with SAFER review.
6	Review Communications adequacy during Phase 2 staffing study	Started
7	Review Extend DC Shedding Approach regarding potential spurious actions	Started
8	Determine alternate plant locations for obtaining critical parameters remotely	Started

Overall Integrated Plan Pending Actions		Status
9	Review 480 VAC Diesel Generator FLEX Sizing	Complete. 350 kW DG/unit is required
10	Review 4.16 KVAC Diesel Generator RRC FLEX Sizing	Complete. RRC 2MW unit is acceptable
11	Analysis to maintain acceptable CR temperatures during ELAP, identify additional required strategies/ modifications	Started
12	Review EER operation up to 129°F for 72 hours or provide portable fans, initiate FSG/Time Validation as required	Started
13	Qualify U1 CST regarding tornado wind hazards, identify any required modifications	Started
14	Qualify RWT(s) regarding tornado wind hazards, identify any required modifications	Complete. No modifications required. See Section 4.7 and 4.8
15	Review boron batching alternatives, determine approach, identify required modifications	Complete. Not Required. See Section 4.7 and 4.11
16	Perform analysis supporting survivability of one or more non-qualified water tanks	Started
17	Finalize boration requirements for Cold Shutdown Margin and timing of injection with electrical power availability. Ensure letdown flow is not required or provide modification to provide letdown. Update milestone as necessary.	Started. Letdown modification is not required. See Section 4.5
18	Review boron precipitation during Phase 1&2 (pool boiling) and Phase 3 (final cooldown) for Mode 6&5 w/o SGs	Closed – Not Required. See Section 4.11
19	Evaluate establishment of contract or letter of agreement for water supply by tanker trucks	Started
20	Review M5 containment vent path (RWT gravity feed/Containment overpressure) Consider LCO 3.9.4, RAB/CR ventilation. Confirm adequacy of Unit 2 8" mini-purge line size.	Closed – Not Required. See Section 4.11 (Note: Reviewed; will now use 30" Escape Hatch)
21	Review potential modification for an 8" relief path to prevent U1 containment overpressure in M5	Closed – Not Required. See Section 4.11 (and note above)
22	Review safeguard equipment initiation with respect to M5 containment vacuum analysis	Complete. Not Required. See Section 4.11 (Note: Reviewed; will lockout equipment)
23	Review LUHS Pumping System RRC FLEX Sizing	Started
24	Ensure FHB L-shaped door can be opened in the required time frame or identify alternate venting approach	Re-Opened; Under Evaluation
25	Provide Technical Basis for WCAP-17601-P deviations to NRC during six month updates	Ongoing. No deviations. See Section 4.1
25A	Time validation study for isolation of controlled bleed off (CBO) lines within 10 minutes	Complete and acceptable; CBO lines can be isolated within 10 minutes post event
26	Time validation study for completing DC load shedding within specified time period	Complete and acceptable for current strategy – Unit 1: ~ 30 minutes; Unit 2: ~ 30 minutes (inverters)/one hour (balance); to be re-evaluated (see

Overall Integrated Plan Pending Actions	Status
	Action 26A below)
26A Time validation study for completing revised DC load shedding discussed in Section 4.9 within specified time period, to include any impact to required instrumentation and Control Room heat up	Started
27 Time validation study for Control Room ventilation	Complete
28 Time validation study for Battery Room ventilation	Closed – Not Required. Battery Room roof exhausters will be powered when the battery room chargers are placed in operation; both will be powered by same FLEX 480V portable diesel-generator.
29 Time validation study for Electrical Equipment Room ventilation	Complete
30 Time validation study for FHB ventilation and the deployment and staging of SFP makeup/spray capability	Complete
31 Time validation study for 480 VAC diesel generator to the station 480 VAC bus	Complete
32 Time validation study for CST non-seismic lines isolation, as required by design	Closed – Not Applicable. See Section 4.2
33 Time validation study for CST cross-connect	Complete
34 Time validation study for FLEX CST pump deployment	Complete
35 Time validation study for FLEX SG pumps for CST/AFW	Complete and acceptable; pumps can be deployed ~ five hours post event)
36 Time validation study for boration to establish Cold Shutdown Margin (M1-4 w/SGs)	Complete
37 Time validation study for establishing power to SIT MOVs to isolate	Complete
38 Time validation study for establishing RWT gravity flow path to RCS (include mid-loop conditions)	Closed – Not Applicable. See Section 4.11
39 Time validation study for FLEX SG pump for RWT/RCS	Closed – Not Applicable. See Section 4.11
40 Time validation study for batch boration to maintain borated water supply (M6 & 5 w/o SGs)	Closed – Not Applicable. RWT available for makeup use. See Section 4.7 and 4.11
41 Time validation study for venting containment in mid-loop conditions	Closed – Not Applicable. See Section 4.11
42 Time validation study for isolating Fuel Transfer Tube path.	Closed – Not Applicable. See Section 4.11
43 Time validation study for establishing containment vent path.	Closed – Not Applicable. See Section 4.11
44 Time validation study for isolating CCW Flow to Containment Fan Cooler Penetrations	Closed – Not Applicable. See Section 4.11
45 Time validation study for hoses for SFP makeup/spray in	Complete

Overall Integrated Plan Pending Actions		Status
	Phase 1	
46	Time validation study for FLEX SFP pump	Complete
47	Time validation study for refueling FLEX equipment	Started
48	U1 & U2 Construct FLEX Equipment Storage Building Storage Building	Started
49	U1 & U2 Install external satellite phone antenna and docking stations for TSC & EOF	Started
50	U1 & U2 Install new cabling with disconnects for MCC supplying battery chargers. Alternate connections line side	Closed – Not Applicable. See Section 4.4
51	U1 & U2 Change essential instrumentation source to vital 120VAC power panel	Started
52	U1 & U2 Install cabling to Class 1E 480 VAC Switchgear A&B for primary and alternate connection of 480 VAC FLEX DG	Started
53	U1 & U2 Install transfer switches on load side charging pumps and Class 1E battery chargers. Alternate connection.	Closed – Not Applicable. See Section 4.4
54	U1 & U2 Design cabling/disconnects for Class 1E 4.16 KVAC busses A&B	Started (Installation would be performed for Phase 3)
55	U1 & U2 Install RCP low leakage seals	Closed – Not Applicable. See Section 4.1
56	U1 Install ADV seismic pneumatic backup and air pressure regulator, provide quick connects	Started (Design Issued; EC 279190)
56A	U1 Time validation study for ADV Operator actions	Complete and acceptable; Operator actions can be completed within 90 minutes post event
57	U1 Install modifications for CST as required by tornado wind hazard analysis	Not Started
58	U1 & U2 Qualify non-seismic lines penetrating CSTs or use another approach to qualify additional CST inventory	Closed – Not Applicable. See Section 4.2
59	U1 & U2 Qualify non-seismic CST cross-connect	Complete
60	U1 & U2 Install 2 connections per CST for refilling the CSTs via FLEX CST pump	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
61	U1 & U2 Install 2 connections per CST for suction point for FLEX SG pump	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
62	U1 & U2 Install 2 connections on AFW lines upstream of MVs for FLEX SG pump to symmetrically feed both steam generators	Started. See Section 4.3
63	U1 & U2 Install single connections for taking suction on non-qualified tanks	Started (Design Issued; EC 278639)
64	U1 & U2 Install modifications for RWT as required by tornado wind hazard analyses	Closed – Not Required. See Section 4.7 and 4.11

Overall Integrated Plan Pending Actions	Status
65 U1 & U2 Install RWT cross-connect sized for gravity fill as required by tornado wind hazard analyses	Closed – Not Applicable. See Section 4.8
66 U1 & U2 Install 2 connections per RWT for suction point for FLEX SG pump/FLEX CST Pump	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
67 U1 & U2 Install 2 connections per RWT for CST FLEX pump discharge	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
68 U1 & U2 Install 2 connections on LPSI pump discharge piping for RCS cold leg injection via FLEX pump	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
69 U1 & U2 Install 2 connections on LPSI pump suction piping (Mode 6 with Rx head off/SG primary manways off)	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
70 U1 Provide containment vent path to ensure sufficient RWT gravity flow for RCS makeup	Closed – Not Required. See Section 4.11 (Note: Reviewed; will now use 30" Escape Hatch)
71 U1 & U2 Missile protect ICW line I-2 ½-CW-178 located on the exterior of U1 & U2 FHBs	Closed – Not Required. See Section 4.16
72 U1 & U2 Install ICW manifolds with hose connections and isolation valves for LUHS	Started (Design Issued; EC 279190 – Unit 1; EC 279191 Unit 2)
73 Create new site procedures, including one(s) for use of Satellite communications	Started
73A Revise existing site procedures, including EOPs to reflect isolation of CBO lines within 10 minutes post event	Started
74 FSG: Establishing FLEX Control Room Ventilation	Started
75 FSG: Extended DC bus load shedding	Started
76 FSG: Damage assessment following event	Started
77 FSG: Accessibility considerations for personnel to enter areas to perform local manual actions	Started
78 FSG: Deployment and staging of portable equipment (Onsite and Offsite)	Started
79 FSG: Operation of the FLEX equipment (startup, shutdown, operational monitoring, minor troubleshooting	Started
80 FSG: Operation of DFO transfueler, filling from U2 DFO tanks, filling FLEX portable equipment, etc.	Started
81 FSG: Restore AC power or alternate power sources for specific plant equipment	Started
82 FSG: Lighting and communications necessary for ingress and egress to plant areas for deployment of FLEX strategies	Started
83 FSG: Deployment and operation of 480 VAC diesel generator	Started
84 FSG: Power restoration with ESF signals present due to de-energized instrument inverters	Started

Overall Integrated Plan Pending Actions	Status
85 FSG: Repowering selected station loads to support long term safety functions (load management)	Started
86 FSG: Operation of ADVs with backup compressed gas	Started
87 FSG: Deployment and operation of FLEX CST pump	Started
88 FSG: Maintaining flow to SGs, with identified backup sources and criteria for transferring between sources	Started
89 FSG: Deployment and operation of FLEX SG pump	Started
90 FSG/EOP-10 to address for FLEX RCS cooldown (cooldown, solid plant conditions, SIT isolation, Attach 1B)	Started
91 FSG: Guidance for SIT injection and isolation	Started
92 FSG: Establish RWT gravity flow to RCS and criteria for transfer to FLEX SG pump	Started
93 FSG: Guidance for boron mixing	Closed – Not Applicable. RWT available for makeup use. See Section 4.7 and 4.11
94 FSG: Deployment and operation of FLEX SFP pump	Started
95 FSG: Guidance for isolation of CCW penetrations for CFC Coolers	Closed – Not Applicable. See Section 4.11
96 FSG: Guidance for venting containment in M5/6 Once-Through-Cooling with LUHS (include CS Lockout)	Closed – Not Applicable. See Section 4.11
97 FSG: Deployment and operation of RRC 4.16 KVAC generator	Started
98 FSG: Deployment and operation of RRC pumping system for ICW	Started
99 FSG: Deployment and operation of FLEX SG pump: injection for vapor bound LPSI pump	Closed – Not Applicable. See Section 4.11
99A FSG: Transition from FLEX Equipment to Plant Equipment	Started
100 Implement FLEX program stipulating the required administrative controls to be implemented	Started
101 Confirm adequacy of access provisions for locked areas affected by loss of ac power and address any additional guidance or procedure upgrades required	Started
102 Provide final versions of electrical one-line diagrams in a future six-month update.	Started
103 Provide update of any changes to dc coping strategy	Started. See Section 4.9
104 U1 & U2 Install 1 connection on one SFP Pump suction line for SFP FLEX pump discharge	Started. See Section 4.16
105 Install two sets of secondary water supply connections from underground water main (Ft. Pierce Utilities) at north and new south metering stations	Started. See Section 4.7

Overall Integrated Plan Pending Actions	Status
106 Install removable flood barriers at watertight doors to ECCS Pump Rooms.	Started. See Section 4.17

Alpha suffixes and numbers above 100 indicate additional items beyond those identified in Reference 1

Draft Safety Evaluation Pending Items	Status
Draft NRC Safety Evaluation has not been received.	N/A

6A Open and Confirmatory Items from Interim Staff Evaluation

The NRC Interim Staff Evaluation and Audit Report on the St. Lucie Overall Integrated Plan have been received via Reference 13. Responses to the following two Open Items and 15 Confirmatory Items are in the process of being developed. Where responses have been developed though not completed or reviewed by the NRC, brief summary remarks are added to the Notes section with St. Lucie response white paper tracking number:

Open Items

Item Number	Description	Notes
3.2.1.8.A	Core Sub-Criticality – Confirm that St. Lucie will apply the generic resolution for boron mixing under natural circulation conditions potentially involving two-phase flow, in accordance with the conditions provided in the NRC's endorsement letter dated January 8, 2014, or alternately, justify the boric acid mixing assumptions that will ensure adequate shutdown margin exists through all three phases of an ELAP event.	St. Lucie will apply the generic requirement per Reference 16 regarding conditions and timing for boron mixing. Response to be included with Program Document.
3.2.1.8.B	The St. Lucie RCS Inventory coping strategy involves an alternate approach relying on repowering one of three installed charging pumps in each unit using a portable 480 VAC FLEX generator. Justify how these installed pumps will be capable of performing their mitigating strategies function following an undefined ELAP event, in contrast with using a portable FLEX pump.	St. Lucie repowering and use of an installed charging pump as an alternate coping strategy is currently being evaluated. Response to be included with Program Document.

Confirmatory Items

Item Number	Description	Notes
3.1.1.2.A	Confirm that the routes for deployment of FLEX equipment provide for at least one connection point for the FLEX equipment that will only require access through seismically robust structures, consistent with consideration 2 of NEI 12-06, Section 5.3.2.	St. Lucie has ensured that the FLEX equipment staged locations and cable/hose routes are protected from seismic events or allow for multiple placement locations/routes. Response to be included with Program Document.
3.1.1.4.A	Confirm that the deployment routes and methods to be used will enable delivery of resources from the RRC staging area to the site following a BDBEE.	St. Lucie deployment routes and methods have been reviewed by SAFER and enable delivery of off-site resources. Response to be included with Program Document.
3.2.1.A	The NRC staff endorsed the PWROG position paper on the use of the Combustion Engineering Nuclear Transient (CENTS) code in the ELAP analysis for Combustion Engineering plants, with the limitation that it can only be applied to the flow conditions prior to reflux boiling initiation. Confirm that the applicable ELAP analyses for St. Lucie meet the above limitation on the use of CENTS.	St. Lucie ELAP analysis CENTS code results are used for non-reflux boiling conditions. Response to be included with Program Document.
3.2.1.1.A	Confirm the plant-specific RCP seal leakage rates assumed for St. Lucie from time zero to the time when subcooling in the RCS cold-legs decreases to 50 degrees F° and confirm the impact of these leakage rates on the plant-specific time constraints and sequence of events (SOE). (Note: The TER, on page 30 of 69, listed an incorrect ADAMS accession number for the August 16, 2013, PWROG position paper on RCP seal leakage; it should be ML13235A151).	St. Lucie RCP seal leakage rates remain at 1 gpm/seal with early CBO isolation included in SOE. Response to be included with Program Document.
3.2.1.2.B	Confirm the assumption that the RCP seal leakage rate is less than 1 gpm per RCP during an ELAP before the controlled bleed off is isolated.	St. Lucie RCP Seal leakage is <1 gpm per seal up to CBO isolation. Response to be included with Program Document.

Item Number	Description	Notes
3.2.1.5.A	Confirm that the Rosemount pressure transmitters credited in an ELAP event will continue to function in the anticipated environmental conditions.	Rosemount transmitters are confirmed to be adequate for ELAP conditions. The FPL EQ Program shows that the environmental conditions that would exist during an ELAP event are enveloped by the type testing done under the program. Other essential instruments, not located in a harsh environment are found acceptable based on vendor specification sheets. Response to be included with Program Document.
3.2.1.9.A	Justify the use of the NOTRUMP computer code to determine the integrated flow rate required to remove decay heat and sensible heat.	AFW integrated flow rate requirement revised to compare to CENTS code output. Response to be included with Program Document.
3.2.1.9.B	Confirm that the revised calculation for RCS makeup flow demonstrates that the FLEX strategies and equipment can provide sufficient flow to accommodate the sensible heat resulting from cooldown in the 2-6 hour time frame.	Flow supplied by AFW and SG FLEX pumps confirmed to supply adequate cooldown flow. Response to be included with Program Document.
3.2.1.9.C	Confirm that the pump criteria and the associated analysis support the adequacy of the RRC-supplied pumps to re-establish Shutdown Cooling for Phase 3.	Reduced flow provided by RRC supplied pump is confirmed to be adequate for reestablishing Shutdown Cooling. Response to be included with Program Document.
3.2.4.2.A	Confirm that the electrical equipment room equipment is analyzed for operation up to a temperature of 129 degrees F° for 72 hours, or that portable fans will be used to provide adequate room ventilation.	Shed heat loads are being recalculated to lower temperature profile and required equipment confirmed to function for 72 hours. Response to be included with Program Document.
3.2.4.4.A	The NRC staff has reviewed the licensee communications assessment (ADAMS Accession Nos. ML12307A116 and ML13057A033) and has determined that the assessment for communications is reasonable (ADAMS Accession No. ML13134A050). Confirm that upgrades to the site's communications systems have been completed.	Upgrades to the communications systems are currently being implemented and are tracked under their Engineering Change Packages with planned completion in April 2015.

Item Number	Description	Notes
3.2.4.6.A	Confirm that the measures to provide main control room ventilation under high ambient temperatures during an ELAP event are sufficient to mitigate room heat-up and allow operators to perform their functions.	Shed heat loads are being recalculated to lower temperature profile and confirm measures are sufficient for habitability. Response to be included with Program Document.
3.2.4.7.A	Confirm the availability of secondary sources of water to provide makeup to the CSTs/RWTs during Phase 2 following a high wind missile event.	New high wind missile separated 2nd potable water supply connection ensure secondary source maintained for Phase 2. Response to be included with Program Document.
3.2.4.10.A	The revised battery load shed strategy is to initially secure one battery, load shed and operate on the other battery, and return the secured battery to service before the first battery is depleted, thereby extending the available coping time. Confirm that this revised strategy is sufficient to power all critical loads during Phase 1, and can be implemented consistent with the assumed time constraints and SOE.	Loads are being calculated to confirm there is sufficient power available. Response to be included with Program Document.
3.3.2.A	Confirm that considerations 1 and 3 of Section 11.8 of NEI 12-06 will be addressed, so that: A) a historical record of previous mitigating strategies and the basis for changes will be maintained, and B) a mitigating strategies change process will be adopted which provides a documented engineering basis that ensures that any change in FLEX strategy continues to ensure the key safety functions are met; or provide an appropriate alternative.	NEI 12-06 considerations will be addressed in Program Document controlled under Appendix B QA program maintains FLEX strategies current and future configuration. Response to be included with Program Document.

7 Potential Draft Safety Evaluation Impacts

Draft NRC Safety Evaluation has not been received.

8 References

The following references support the updates to the Overall Integrated Plan described in this Attachment.

1. FPL Letter L-2013-084 to NRC, Florida Power & Light (FPL)/St. Lucie'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 28, 2013
2. FPL Letter L-2013-192 to NRC, Florida Power & Light (FPL)/St. Lucie'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 June 18, 2013
3. NRC Order Number EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, dated March 12, 2012
4. NEI 12-06 Rev 0, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide (including supplemental guidance contained within posted Flex Guidance Inquiry Forms)
5. WCAP-17601-P Rev 1, Reactor Coolant System Response to Extended Loss of AC Power Event for Westinghouse, Combustion Engineering and Babcock & Wilcox NSSS Designs, January 2013
6. FPL Letter L-2013-254 to NRC, Florida Power & Light (FPL)/St. Lucie's First Overall Integrated Plan 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), dated August 28, 2013
7. NRC Endorsement of Reference 8, Agencywide Documents Access and Management Systems (ADAMS) Accession No. ML13276A183, dated January 8, 2014
8. Westinghouse Position Paper entitled "Westinghouse Response to NRC Generic Request for Additional Information (RAI) on Boron Mixing in Support of the Pressurized Water Reactor Owners Group (PWROG)", ADAMS Accession No. ML13235A135, dated August 15, 2013
9. NEI Position Paper entitled "Shutdown / Refueling Modes", ADAMS Accession No. ML13273A514, dated September 18, 2013
10. NRC Endorsement of Reference 9, ADAMS Accession No. ML13267A382, dated September 30, 2013
11. Electric Power Research Institute (EPRI) Report 3002000623 entitled "Nuclear Maintenance Applications Center: Preventive Maintenance Basis for FLEX Equipment", ADAMS Accession No. ML13276A573, dated September 2013
12. NRC Endorsement of Reference 11, ADAMS Accession No. ML13276A224, dated October 7, 2013
13. Interim Staff Evaluation and Audit Report by the Office of Nuclear Reactor Regulation Related to Order EA-12-049 Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, Florida Power and Light Company, St. Lucie Plant, Units 1 and 2, Docket Nos. 50-335 and 50-389, dated February 6, 2014
14. FPL Letter L-2014-063 to NRC, Florida Power & Light (FPL)/St. Lucie's Second Overall Integrated Plan 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), dated February 26, 2014
15. FPL Letter L-2014-215 to NRC, Florida Power & Light (FPL) Response to NRC 10 CFR 50.54(f) Request for Information Update Regarding Near-Term Task Force Recommendation 2.3, Seismic, dated June 30, 2014
16. Westinghouse Letter LTR-FSE-13-46, Rev. 0-A (DRAFT), Westinghouse Response to NRC Generic Request for Additional Information (RAI) on Boron Mixing in Support of the Pressurized Water Reactor Owner's Group, June 11, 2013

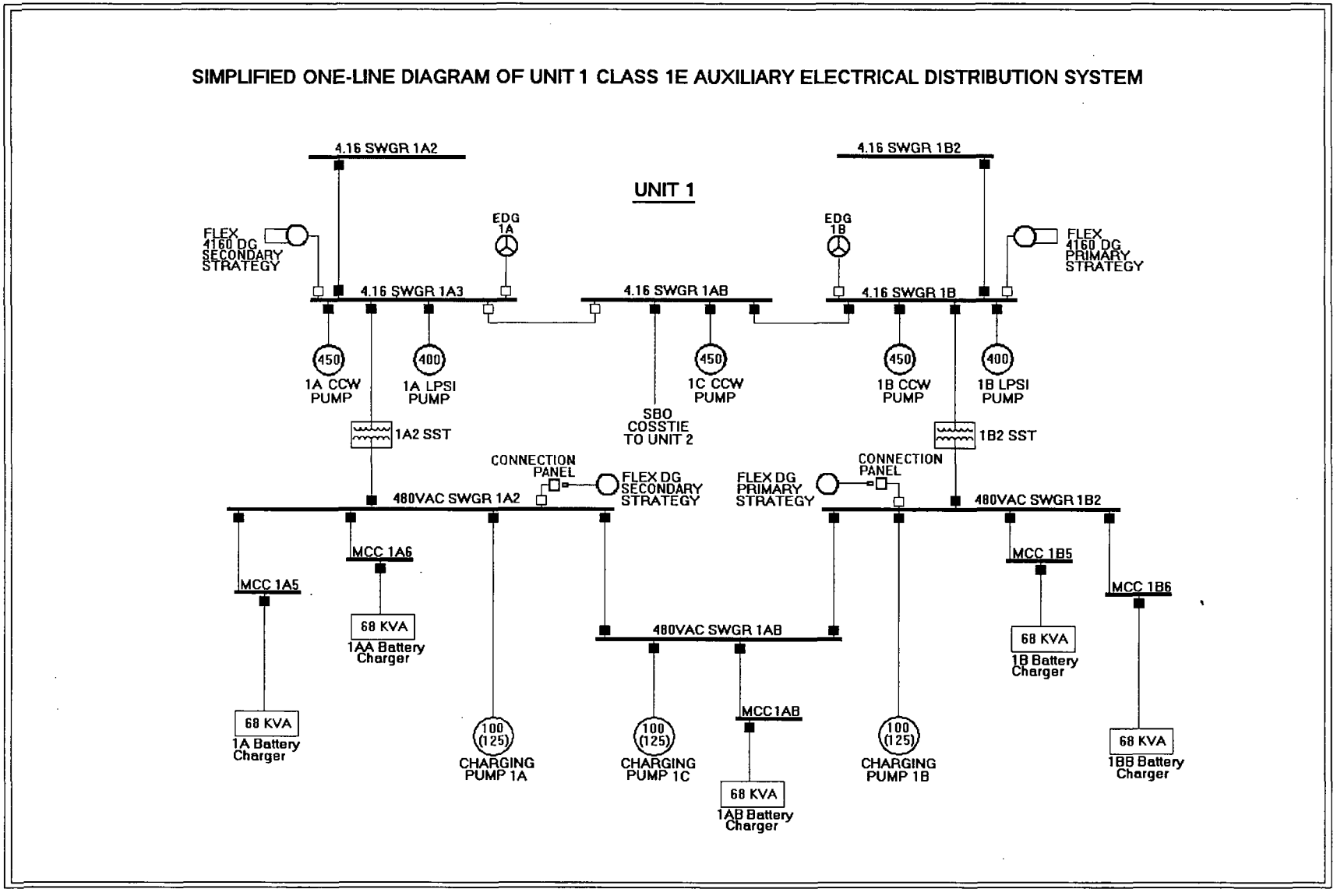


Figure 1 PSL FLEX Electrical Connections (Unit 1) (Rev 0A)

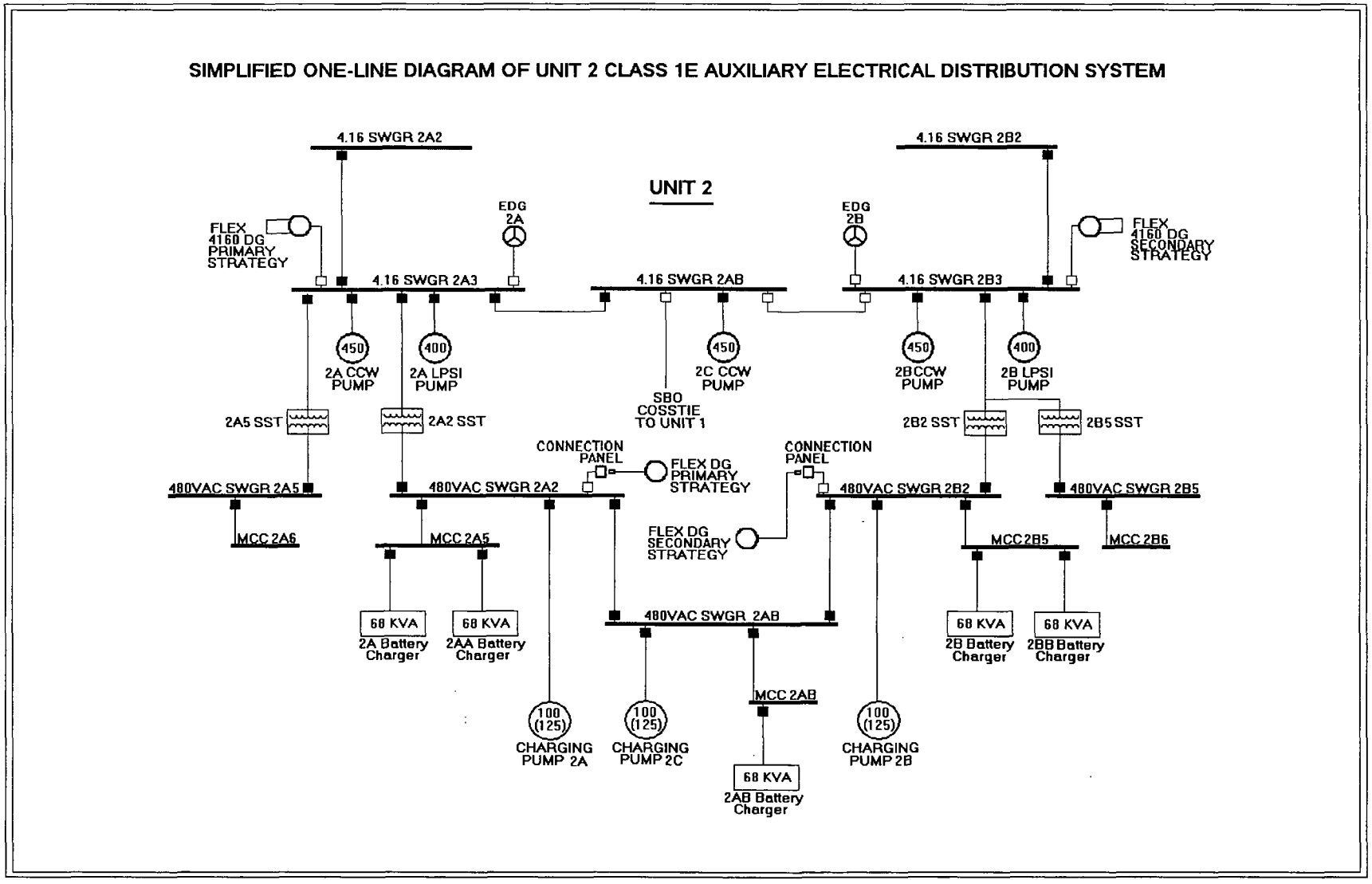
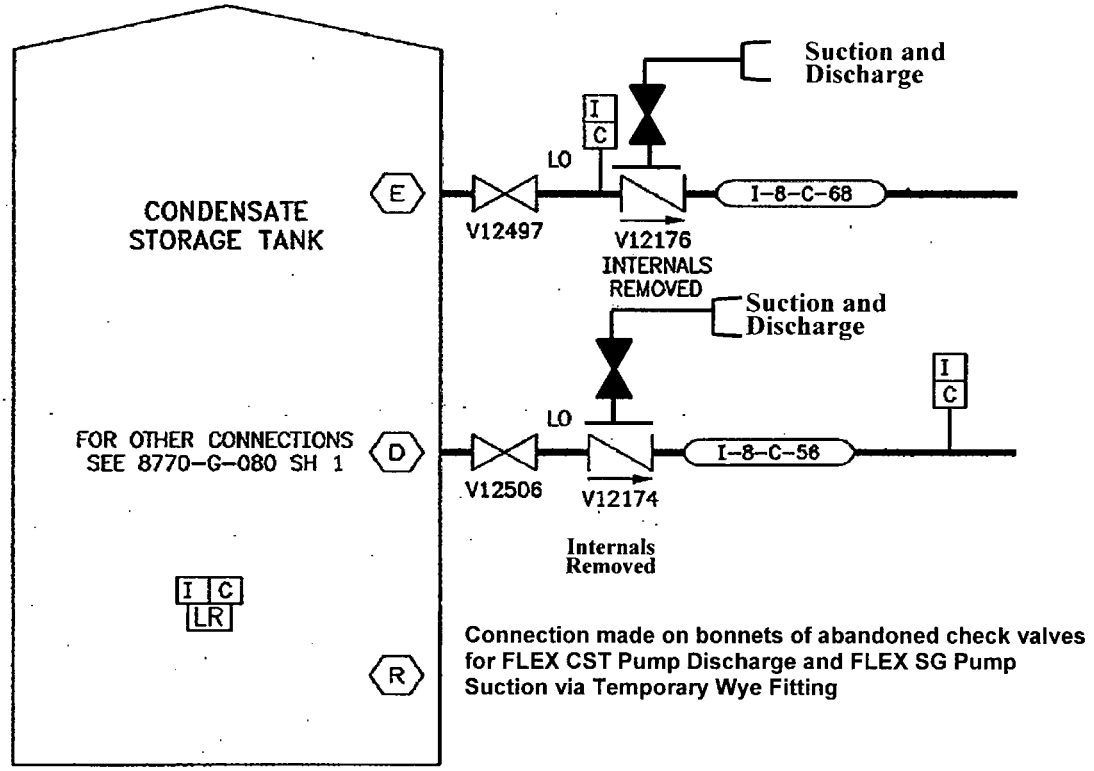
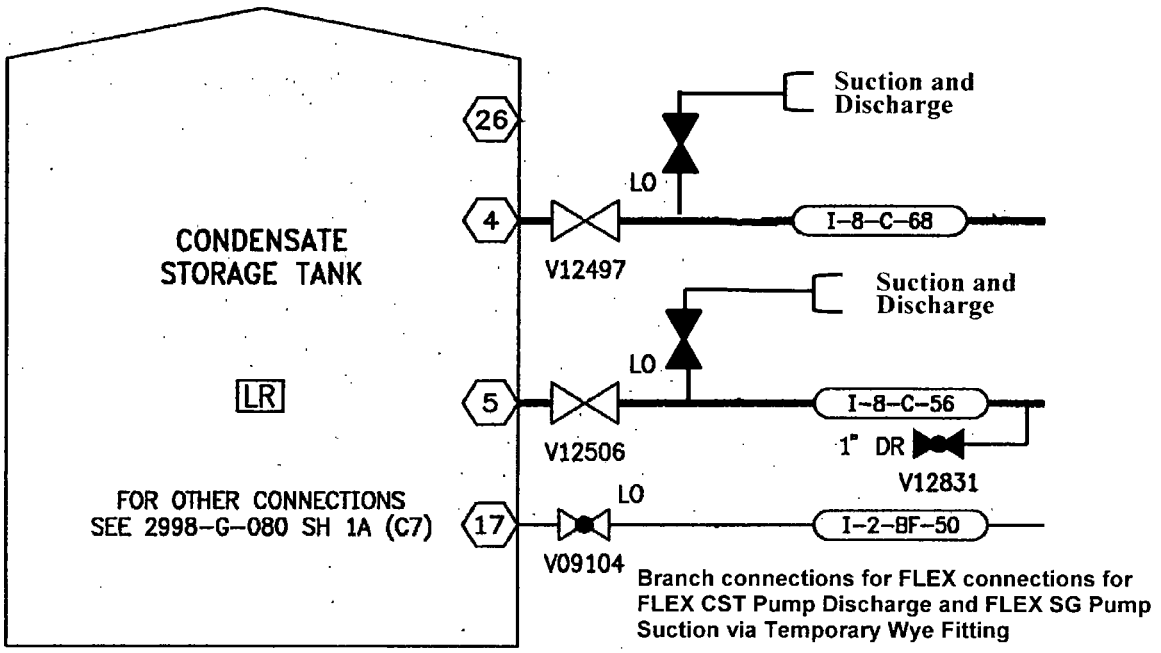


Figure 2 PSL FLEX Electrical Connections (Unit 2) (Rev 0A)

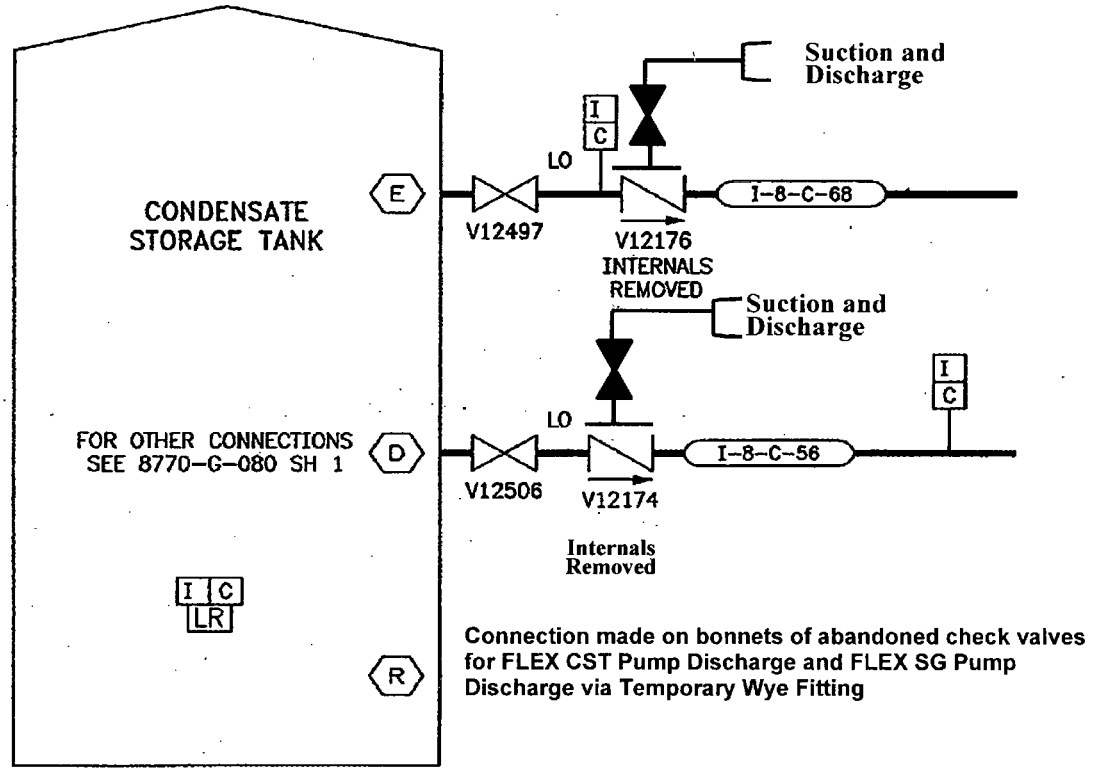


Portion of Drawing 8770-G-080 Sh. 4

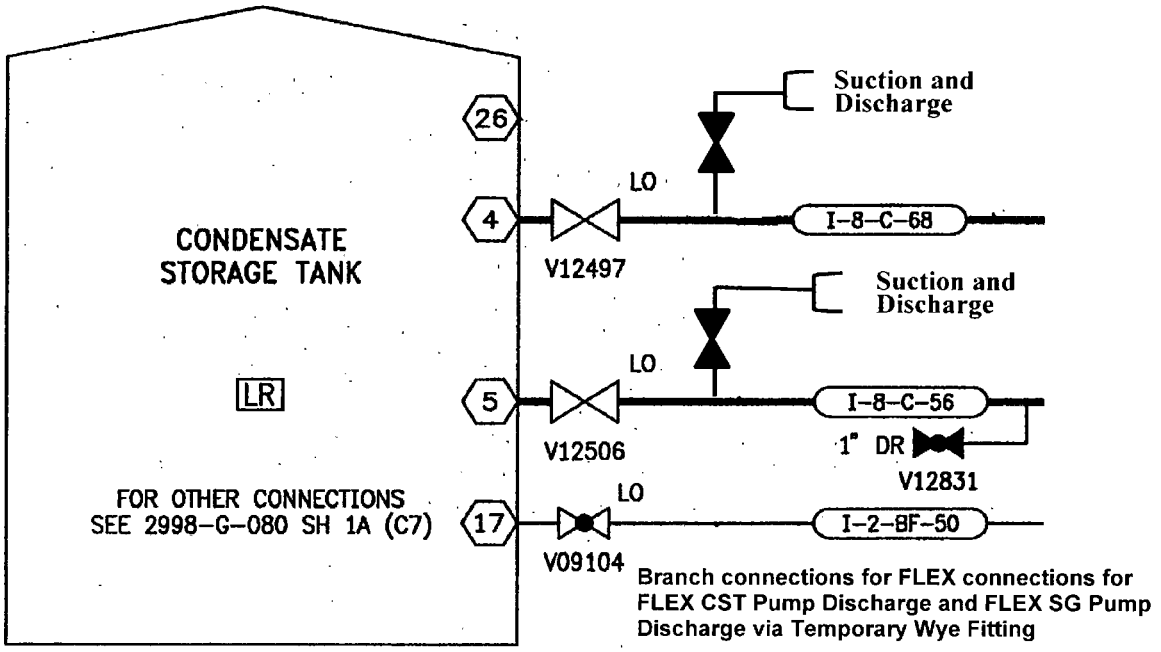


Portion of Drawing 2998-G-080 Sh. 2B

Figure 11 Connections for CST FLEX Pump Suction on CSTs (Rev 1)



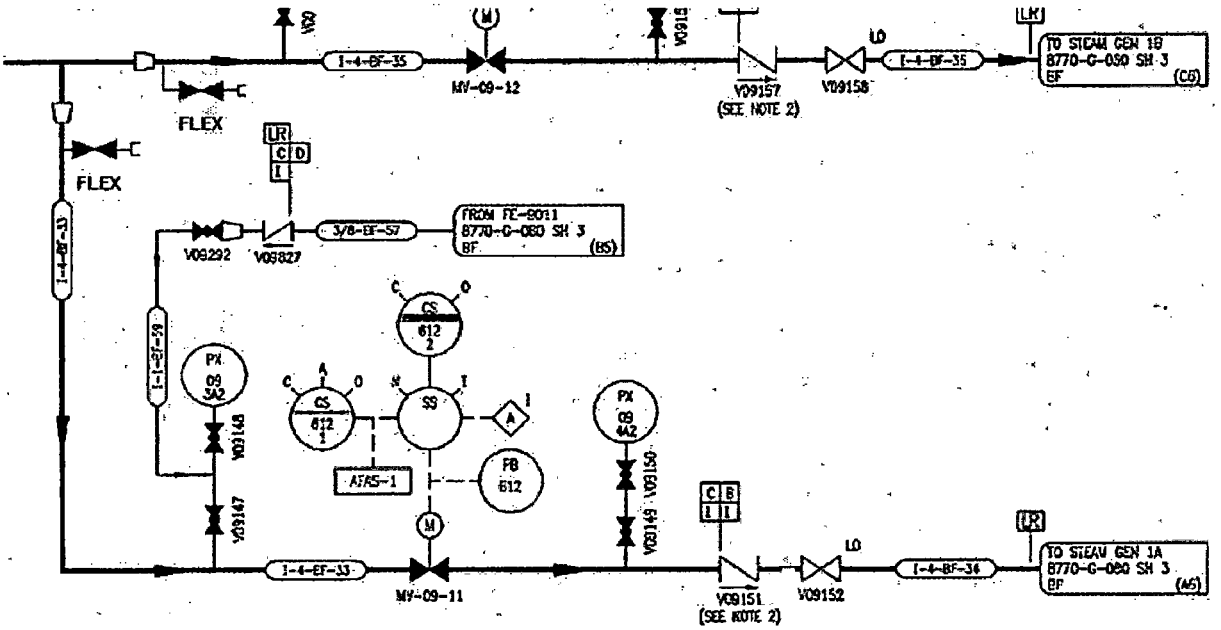
Portion of Drawing 8770-G-080 Sh. 4



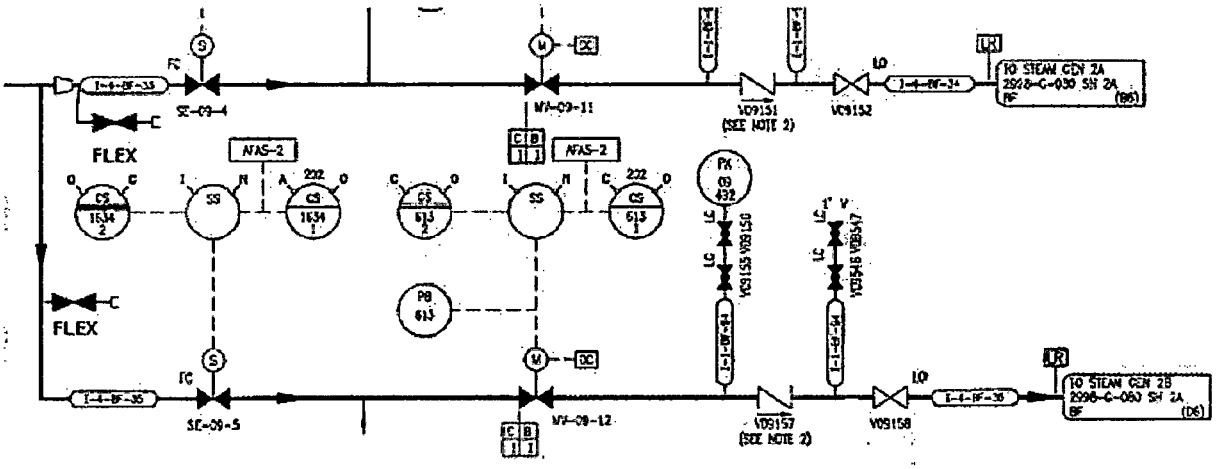
Portion of Drawing 2998-G-080 Sh. 2B

Figure 12 Connections for CST/SG FLEX Pump Discharge for CST Fill (Rev 1)

Install a 4" isolation valve and hose connection to the AFW pump 1C(2C) discharge piping for Steam Generator Injection by using a FLEX pump.



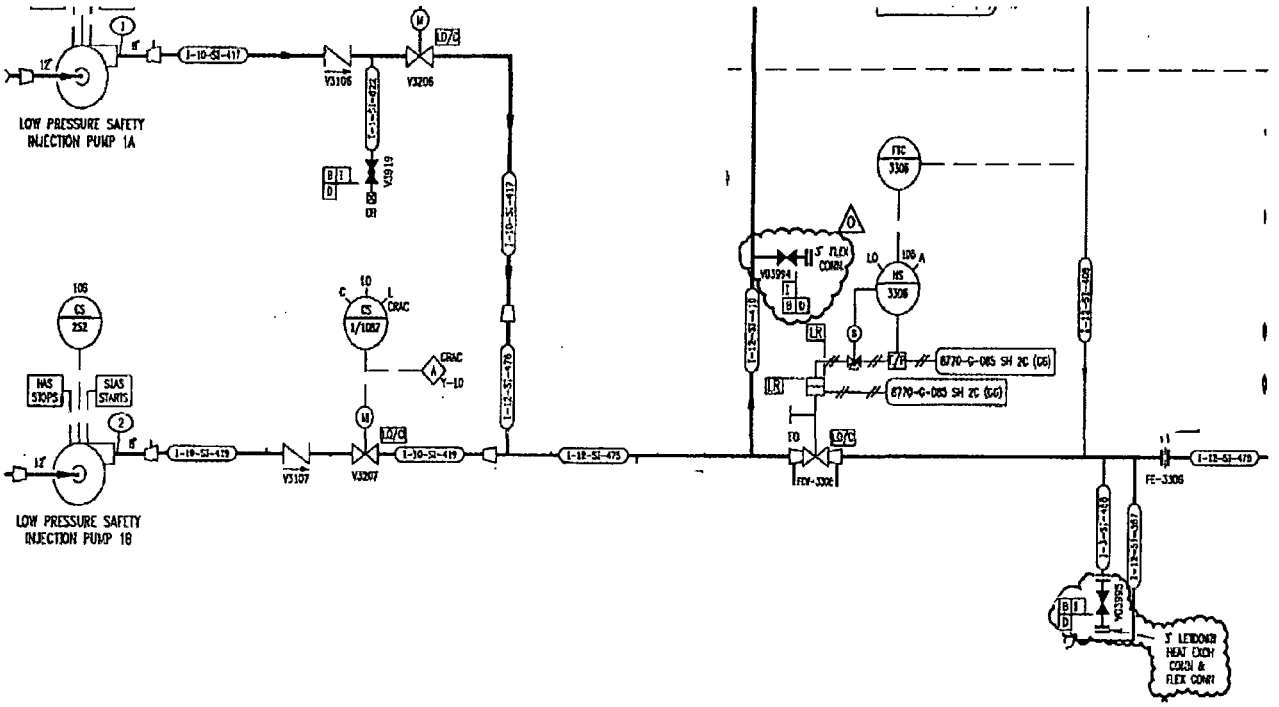
Portion of Drawing
8770-G-080 Sh. 4



Portion of Drawing
2998-G-080 Sh. 2B

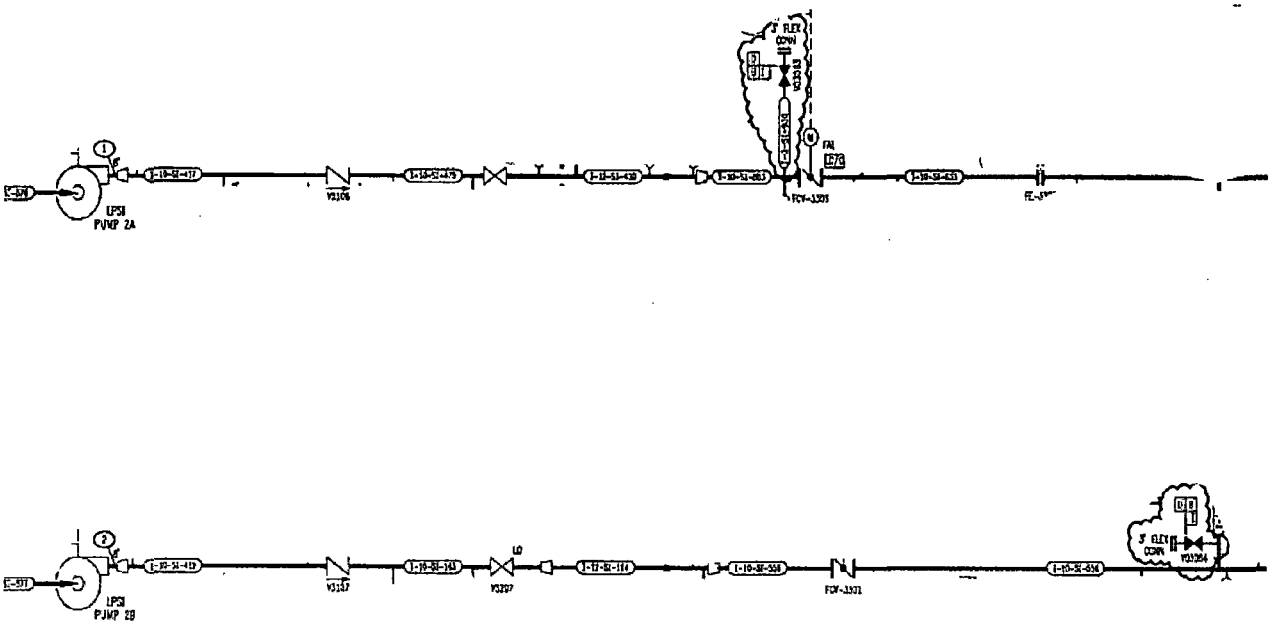
Figure 13 Connections for SG FLEX Pump Discharge to AFW Pump Discharge Lines (Rev 0A)

Install primary and secondary 3" isolation valves & hose connections on the LPSI 1A/1B Pumps common discharge piping. For RCS cold leg injection with FLEX SG Pump drawing suction from the RWT.



Portion of Drawing 8770-G-078 Sh. 130B

Install 3" isolation valves and hose connections on each of the LPSI 2A & 2B Pumps discharge piping. For RCS cold leg injection with FLEX SG Pump drawing suction from the RWT.



Portion of Drawing 2998-G-078 Sh. 130B

Figure 14 Connections for SG FLEX Pump Discharge to LPSI Pump Discharge Lines (Rev 1)

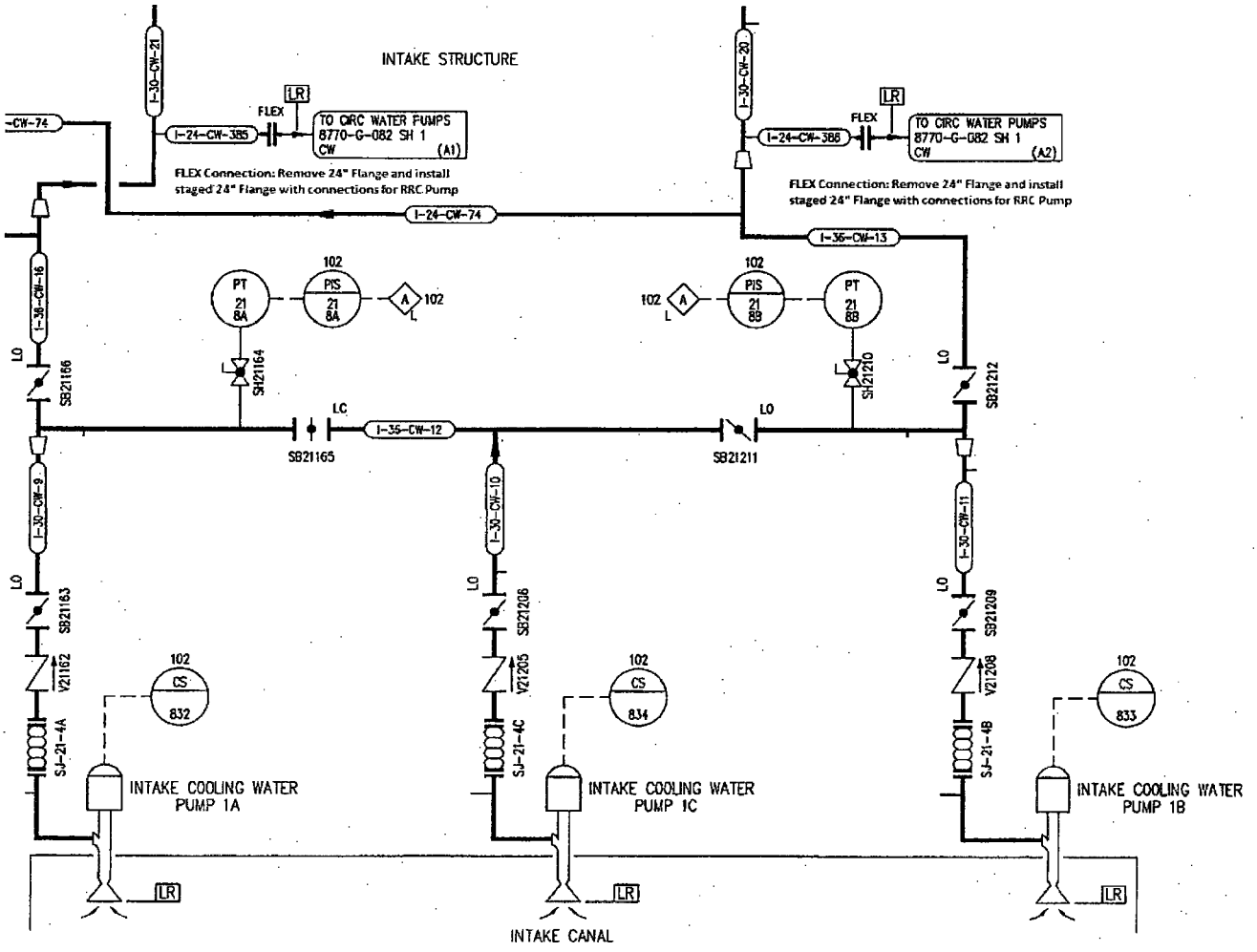


Figure 17 Connections for RRC LUHS Pumping System (Unit 1) (Rev 0A)

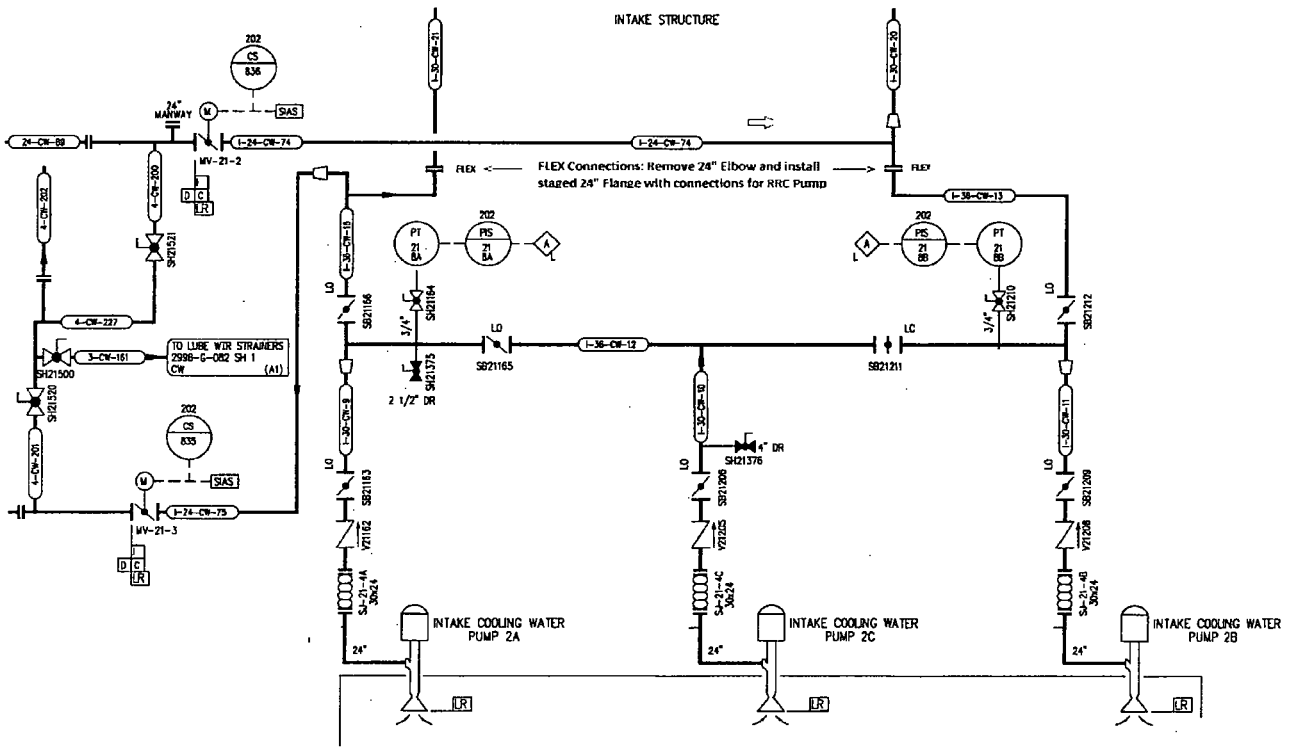


Figure 18 Connections for RRC LUHS Pumping System (Unit 2) (Rev 0A)

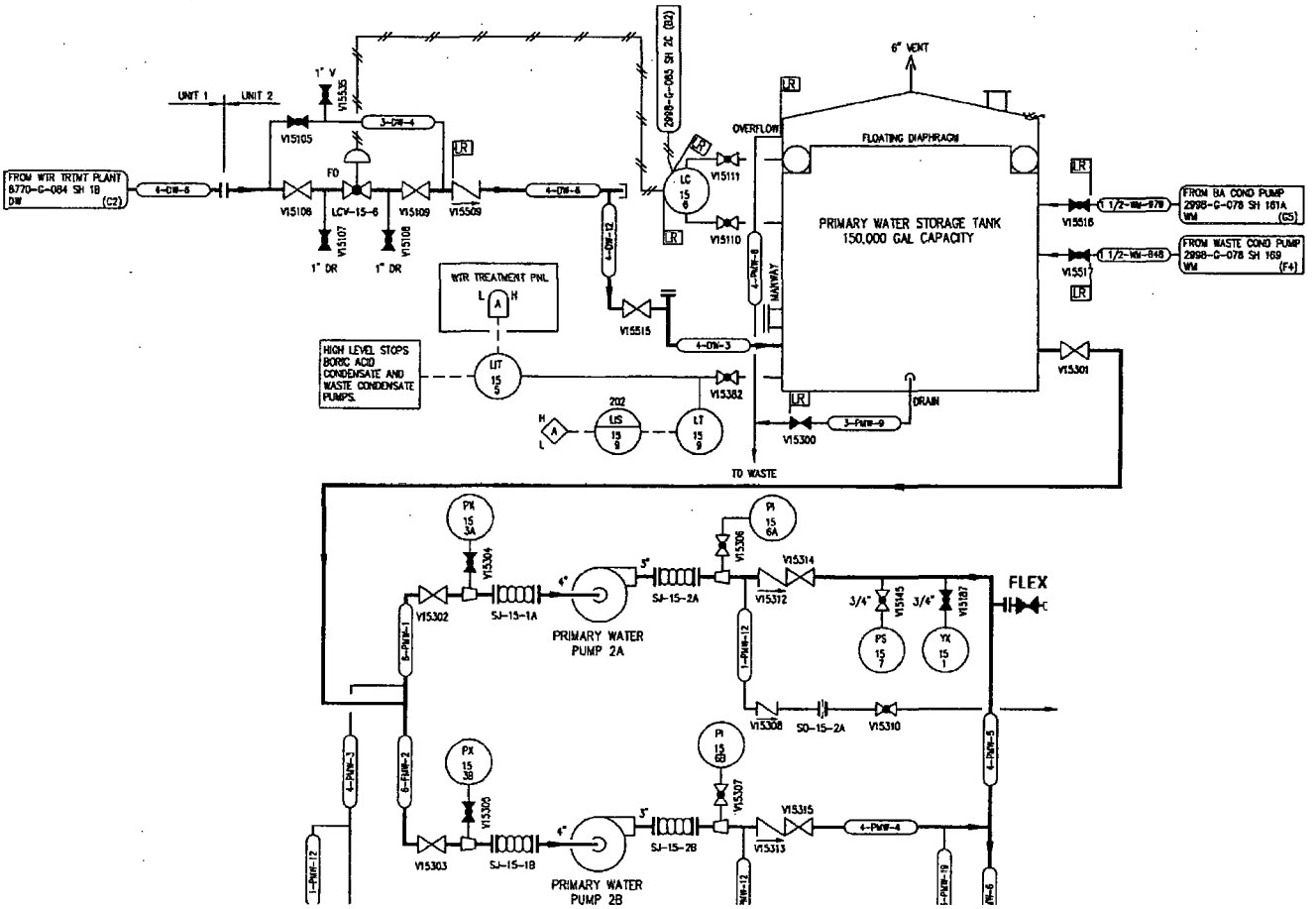


Figure 21 Connections for CST/SG FLEX Pump Suction From PWSTs (Unit 2, Unit 1 Similar) (Rev 0A)

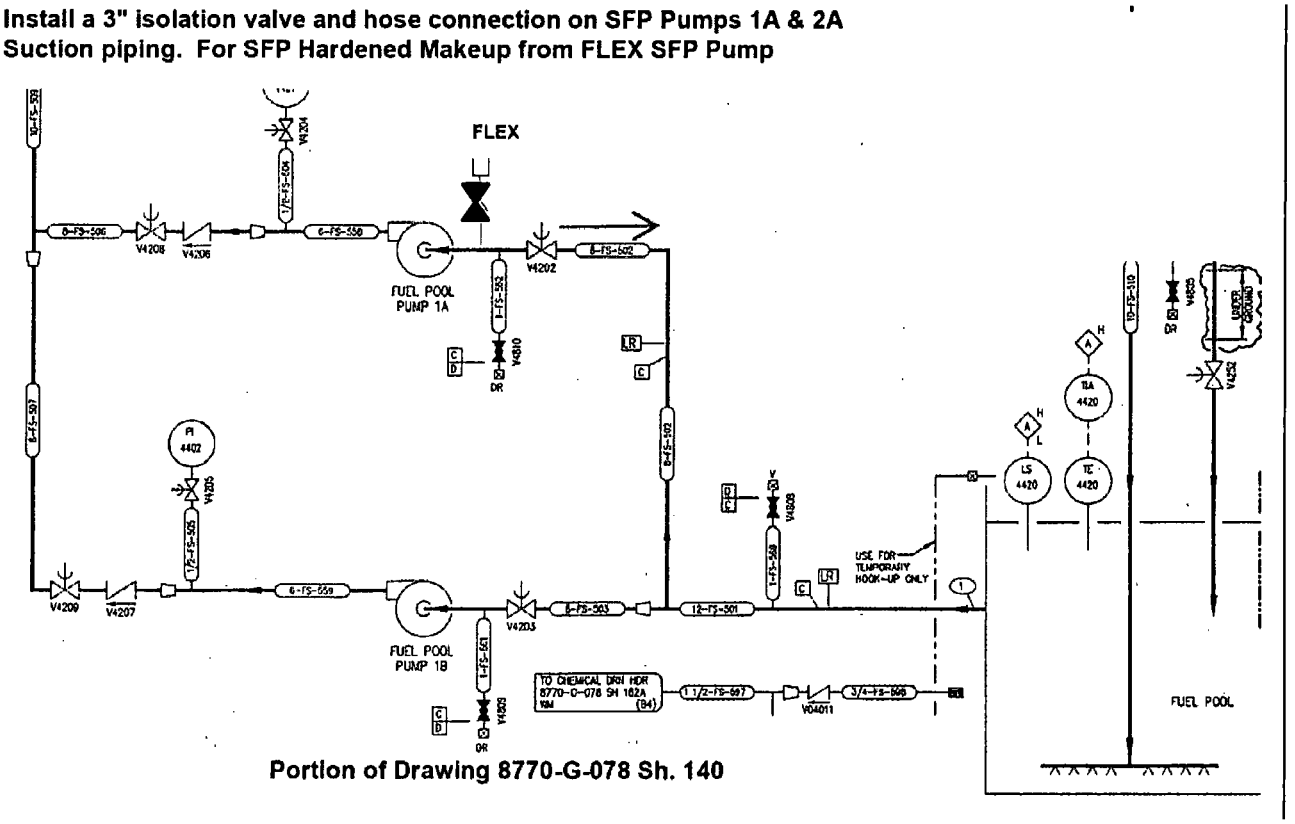


Figure 22 Connection for SFP FLEX Pump Discharge to Fuel Pool Pump (Unit 1, Unit 2 Similar) (Rev 0)

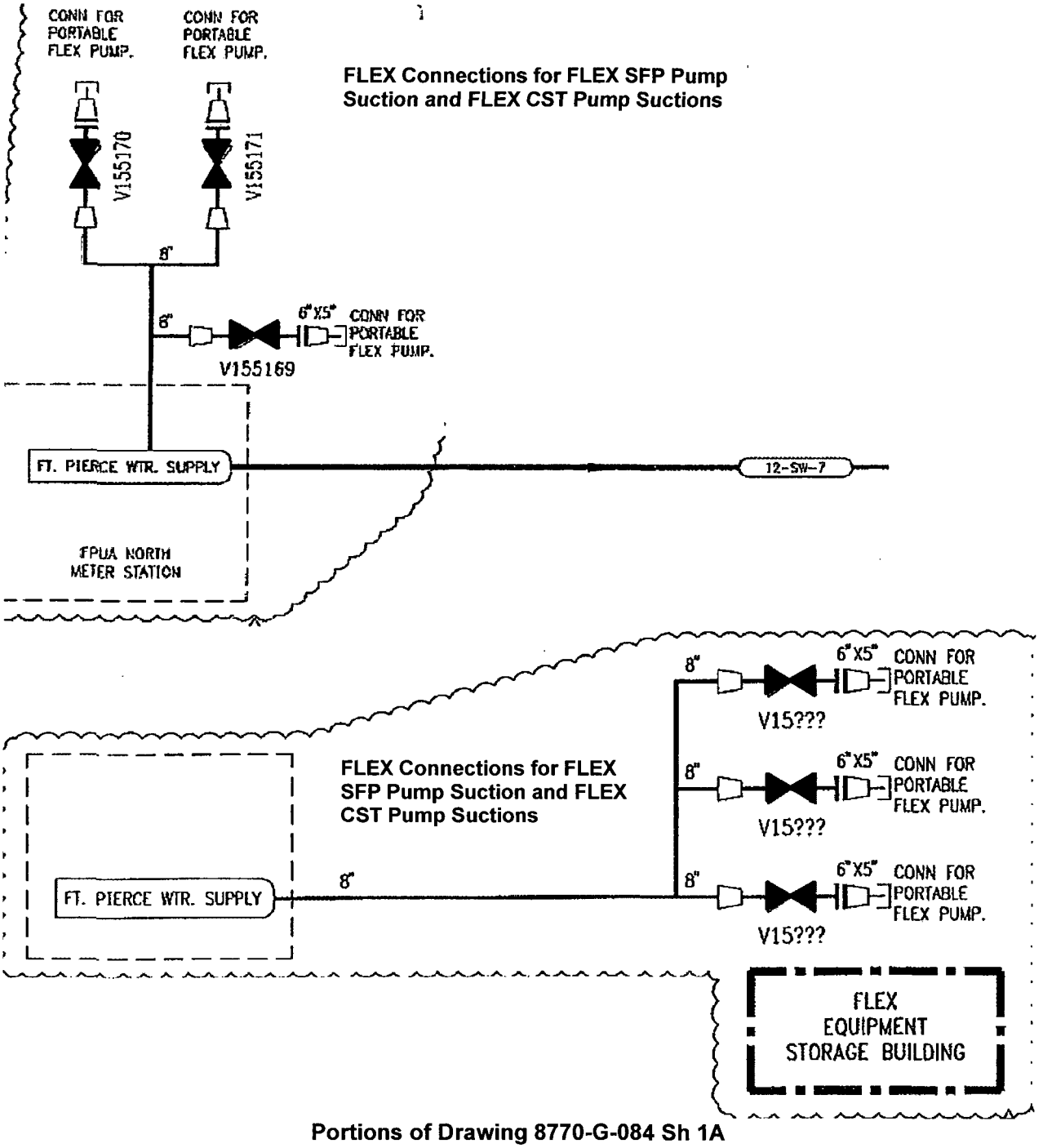
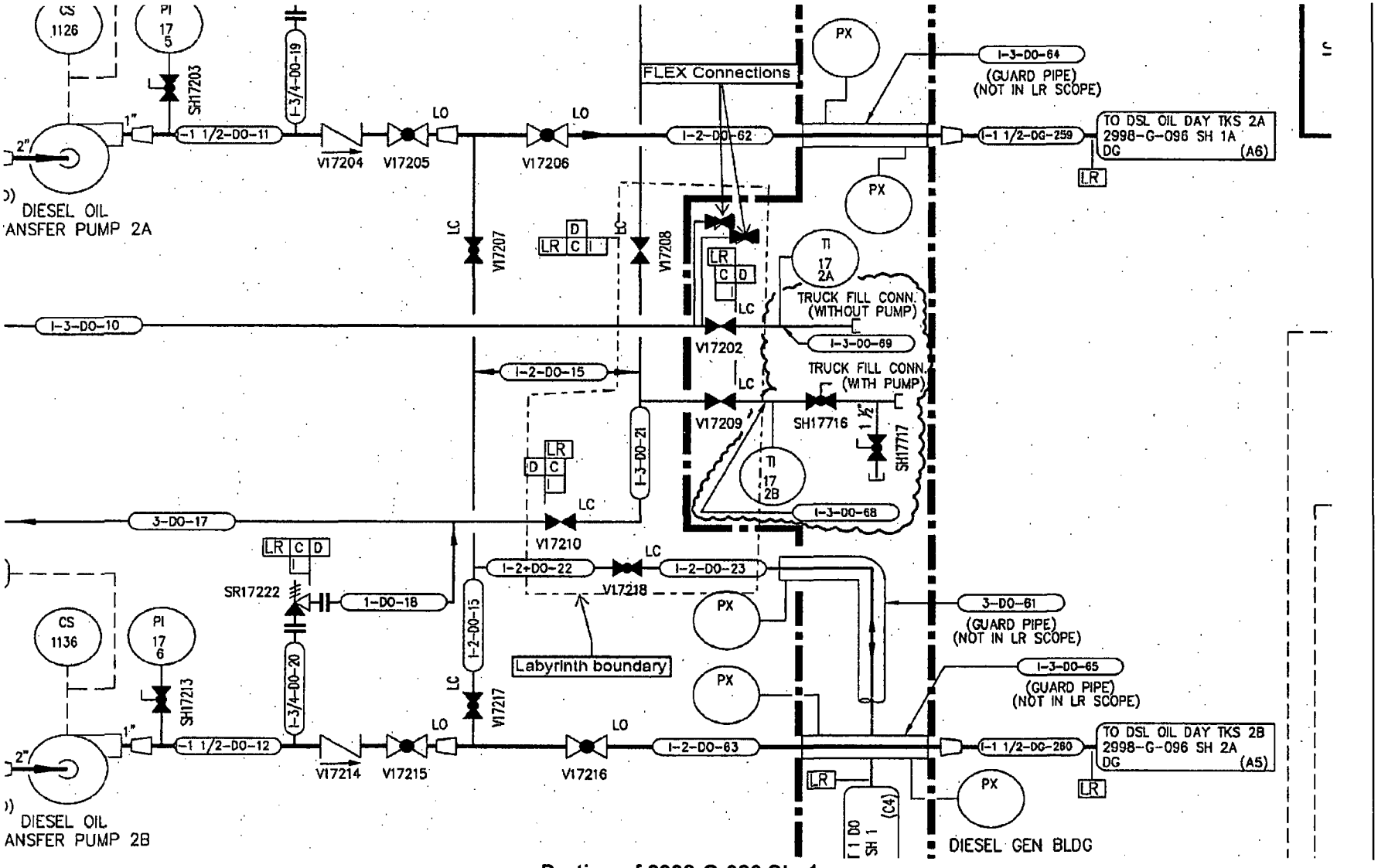


Figure 23 Connections for Secondary Water Sources (Ft. Pierce Utilities) for SFP FLEX Pump Suction and FLEX CST Pump Suctions (Rev. 0)



Portion of 2998-G-086 Sh. 1

Figure 24 Connections for Diesel Oil Gravity Drain Connections from Unit 2 Diesel Oil Storage Tanks (Rev 0)