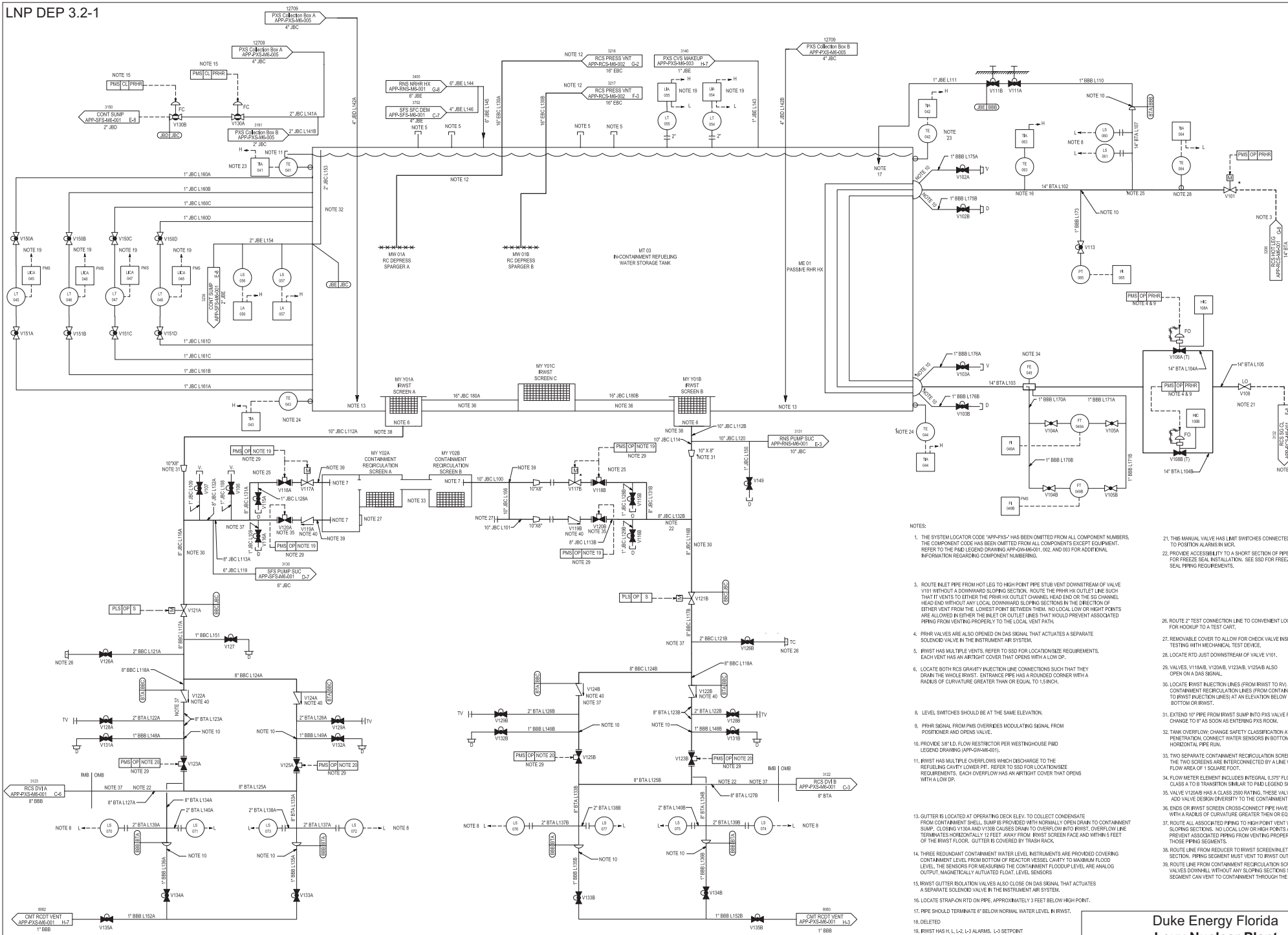

NOTES:

1. THE SYSTEM LOCATOR CODE "APP-PXS-" HAS BEEN OMITTED FROM ALL COMPONENT NUMBERS. THE COMPONENT CODE HAS BEEN OMITTED FROM ALL COMPONENTS EXCEPT EQUIPMENT. REFER TO THE P&ID LEGEND DRAWING APP-GW-M6-001, 002, AND 003 FOR ADDITIONAL INFORMATION REGARDING COMPONENT NUMBERING.

3. ROUTE INLET PIPE FROM HOT LEG TO HIGH POINT PIPE STUB VENT DOWNSTREAM OF VALVE V101 WITHOUT A DOWNWARD SLOPING SECTION. ROUTE THE PRHR HX OUTLET LINE SUCH THAT IT VENTS TO EITHER THE PRHR HX OUTLET CHANNEL HEAD END OR THE SG CHANNEL HEAD END WITHOUT ANY LOCAL DOWNWARD SLOPING SECTIONS IN THE DIRECTION OF EITHER VENT FROM THE LOWEST POINT BETWEEN THEM. NO LOCAL LOW OR HIGHT POINTS ARE ALLOWED IN EITHER THE INLET OR OUTLET LINES THAT WOULD PREVENT ASSOCIATED PIPING FROM VENTING PROPERLY TO THE LOCAL VENT PATH.

4. PRHR VALVES ARE ALSO OPENED ON DAS SIGNAL THAT ACTUATES A SEPARATE SOLENOID VALVE IN THE INSTRUMENT AIR SYSTEM.

5. IRWST HAS MULTIPLE VENTS, REFER TO SSD FOR LOCATION/SIZE REQUIREMENTS. EACH VENT HAS AN AIRTIGHT COVER THAT OPENS WITH A LOW DP.

6. LOCATE BOTH RCS GRAVITY INJECTION LINE CONNECTIONS SUCH THAT THEY DRAIN THE WHOLE IRWST. ENTRANCE PIPE HAS A ROUNDED CORNER WITH A RADIUS OF CURVATURE GREATER THAN OR EQUAL TO 1.5 INCH.

8. LEVEL SWITCHES SHOULD BE AT THE SAME ELEVATION.

9. PRHR SIGNAL FROM PMS OVERRIDES MODULATING SIGNAL FROM POSITIONER AND OPENS VALVE.

10. PROVIDE 3/8" I.D. FLOW RESTRICTOR PER WESTINGHOUSE P&ID LEGEND DRAWING (APP-GW-M6-001).

11. IRWST HAS MULTIPLE OVERFLOWS WHICH DISCHARGE TO THE REFUELING CAVITY LOWER PIT. REFER TO SSD FOR LOCATION/SIZE REQUIREMENTS. EACH OVERFLOW HAS AN AIRTIGHT COVER THAT OPENS WITH A LOW DP.

13. GUTTER IS LOCATED AT OPERATING DECK ELEV. TO COLLECT CONDENSATE FROM CONTAINMENT SHELL. SUMP IS PROVIDED WITH NORMALLY OPEN DRAIN TO CONTAINMENT SUMP. CLOSING V130A AND V130B CAUSES DRAIN TO OVERFLOW INTO IRWST. OVERFLOW LINE TERMINATES HORIZONTALLY 12 FEET AWAY FROM IRWST SCREEN FACE AND WITHIN 5 FEET OF THE IRWST FLOOR. GUTTER IS COVERED BY TRASH RACK.

14. THREE REDUNDANT CONTAINMENT WATER LEVEL INSTRUMENTS ARE PROVIDED COVERING CONTAINMENT LEVEL FROM BOTTOM OF REACTOR VESSEL CAVITY TO MAXIMUM FLOOD LEVEL. THE SENSORS FOR MEASURING THE CONTAINMENT FLOODUP LEVEL ARE ANALOG OUTPUT, MAGNETICALLY AUTUATED FLOAT, LEVEL SENSORS

15. IRWST GUTTER ISOLATION VALVES ALSO CLOSE ON DAS SIGNAL THAT ACTUATES A SEPARATE SOLENOID VALVE IN THE INSTRUMENT AIR SYSTEM.

16. LOCATE STRAP-ON RTD ON PIPE, APPROXIMATELY 3 FEET BELOW HIGH POINT.

17. PIPE SHOULD TERMINATE 6" BELOW NORMAL WATER LEVEL IN IRWST.

18. DELETED

19. IRWST HAS H, L, L-2, L-3 ALARMS. L-3 SETPOINT OPENS CONTAINMENT RECIRCULATION VALVES.

20. ADS STAGE 4 ACTUATION SIGNAL OR A LOW HL LEVEL SIGNAL OPENS IRWST INJECTION VALVES.

21. THIS MANUAL VALVE HAS LIMIT SWITCHES CONNECTED TO POSITION ALARMS IN MCR.

22. PROVIDE ACCESSIBILITY TO A SHORT SECTION OF PIPE FOR FREEZE SEAL INSTALLATION. SEE SSD FOR FREEZE SEAL PIPING REQUIREMENTS.

26. ROUTE 2" TEST CONNECTION LINE TO CONVENIENT LOCATION FOR HOOKUP TO A TEST CART.

27. REMOVABLE COVER TO ALLOW FOR CHECK VALVE INSERVICE TESTING WITH MECHANICAL TEST DEVICE.

28. LOCATE RTD JUST DOWNSTREAM OF VALVE V101.

29. VALVES, V118A/B, V120A/B, V123A/B, V125A/B ALSO OPEN ON A DAS SIGNAL.

30. LOCATE IRWST INJECTION LINES (FROM IRWST TO RV) AND CONTAINMENT RECIRCULATION LINES (FROM CONTAINMENT TO IRWST INJECTION LINES) AT AN ELEVATION BELOW THE BOTTOM OR IRWST.

31. EXTEND 10" PIPE FROM IRWST SUMP INTO PXS VALVE ROOM. CHANGE TO 8" AS SOON AS ENTERING PXS ROOM.

32. TANK OVERFLOW; CHANGE SAFETY CLASSIFICATION AT TANK PENETRATION. CONNECT WATER SENSORS IN BOTTOM OF HORIZONTAL PIPE RUN.

33. TWO SEPARATE CONTAINMENT RECIRCULATION SCREENS PROVIDED. THE TWO SCREENS ARE INTERCONNECTED BY A LINE WITH A MINIMUM FLOW AREA OF 1 SQUARE FOOT.

34. FLOW METER ELEMENT INCLUDES INTEGRAL 0.375" FLOW RESTRICTOR FOR CLASS A TO B TRANSITION SIMILAR TO P&ID LEGEND SHEET 2 NOTE 7.

35. VALVE V120A/B HAS A CLASS 2500 RATING, THESE VALVES ARE EMPLOYED TO ADD VALVE DESIGN DIVERSITY TO THE CONTAINMENT RECIRCULATION LINE.

36. ENDS OR IRWST SCREEN CROSS-CONNECT PIPE HAVE ROUNDED CORNERS WITH A RADIUS OF CURVATURE GREATER THEN OR EQUAL TO 2.25".

37. ROUTE ALL ASSOCIATED PIPING TO HIGH POINT VENT WITHOUT ANY LOCAL DOWNWARD SLOPING SECTIONS. NO LOCAL LOW OR HIGH POINTS ARE ALLOWED THAT WOULD PREVENT ASSOCIATED PIPING FROM VENTING PROPERLY TO THE VENT LOCATIONS FOR THOSE PIPING SEGMENTS.

38. ROUTE LINE FROM REDUCER TO IRWST SCREEN INLET WITHOUT A DOWNWARD SLOPING SECTION. PIPING SEGMENT MUST VENT TO IRWST OUTLET AS THE HIGH POINT.

39. ROUTE LINE FROM CONTAINMENT RECIRCULATION SCREEN TO PARALLEL SQUIB VALVES DOWNHILL WITHOUT ANY SLOPING SECTIONS SO THAT ALL PIPING SEGMENT CAN VENT TO CONTAINMENT THROUGH THE RECIRCULATION SCREENS.

Duke Energy Florida
Levy Nuclear Plant
Units 1 and 2
Part 2, Final Safety Analysis Report

Passive Core Cooling System -
Piping and Instrumentation Diagram
FIGURE 6.3-201

Rev 6