

1090287-MD-1-01d

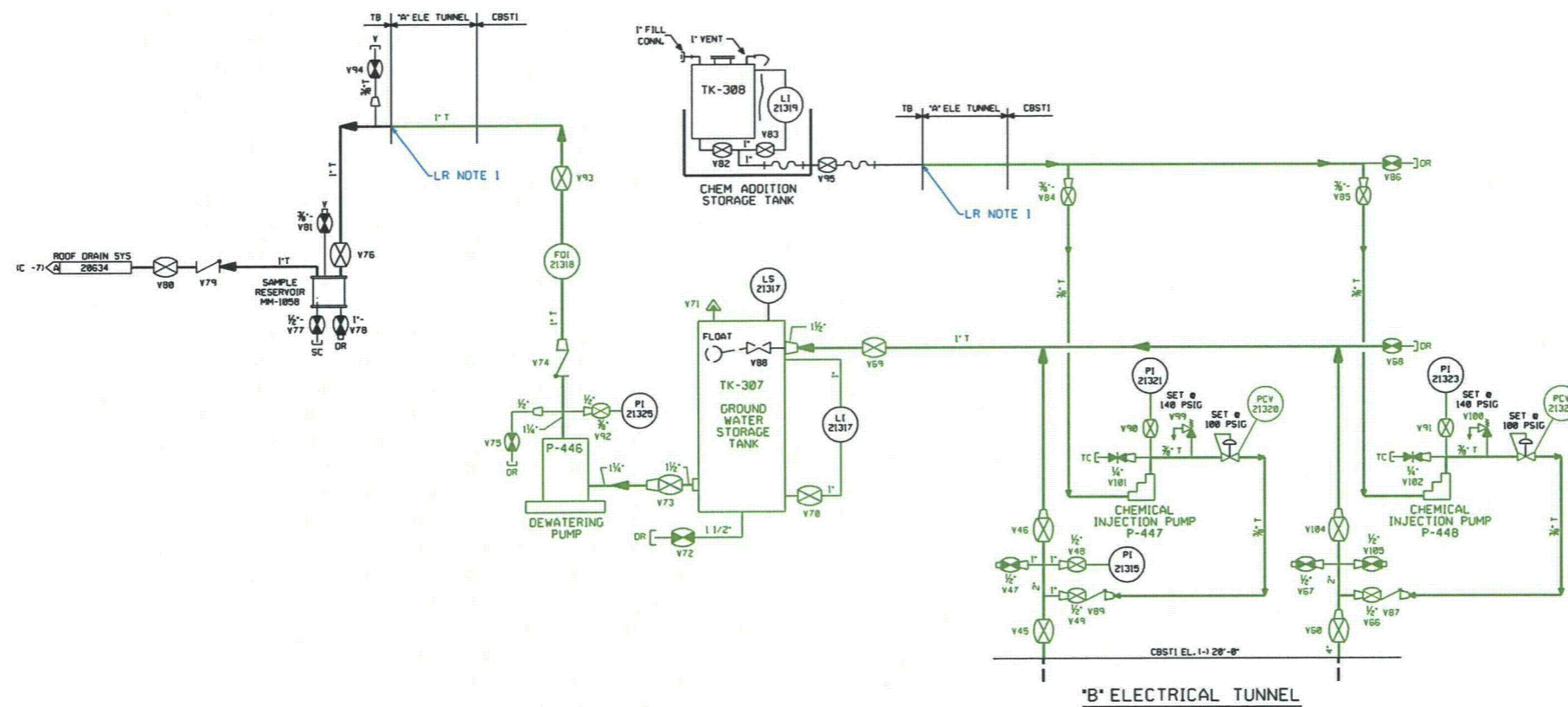
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
 1. THE TURBINE BUILDING (TB) HAS NO SAFETY RELATED COMPONENTS AND THEREFORE ALL COMPONENTS AND PIPING IN THE TB HAVE NO LICENSE RENEWAL (LR) INTENDED FUNCTION AND ARE NOT IN SCOPE.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◊ INDICATES SYSTEM BOUNDARY INTERFACE

NOTES:
 1. WORK THIS DRAWING WITH DRAWINGS 20608.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX DW, UNLESS NOTED OTHERWISE.
 3. △ INDICATES REVISION LEVEL.



REV	DATE	DSGN	CHKD	CE	DESCRIPTION
					ORIGINAL ISSUE

NEXTERA ENERGY
SEABROOK

DEWATERING SYSTEM
DETAIL
LICENSE RENEWAL P&ID

SEABROOK STATION
PID-1-DW-LR20601

REF. DRAWING NO.	REV	TITLE
PID-1-DW-020601	1	DEWATERING SYSTEM DETAIL

PID-1-FO-LR20938

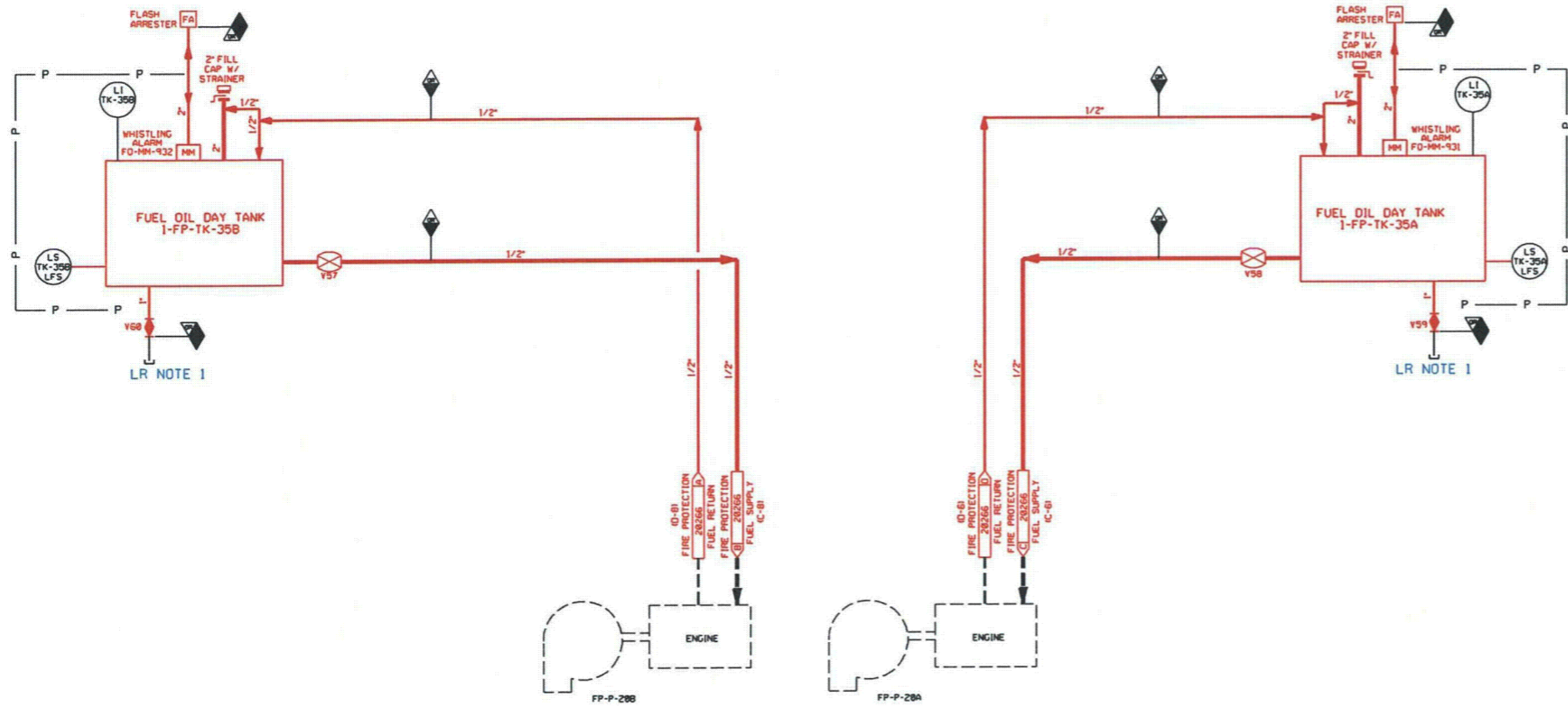
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
 1. RED PIPING IS IN SCOPE FOR CRITERION (a)(3) FIRE PROTECTION AND IS NOT IN SCOPE FOR CRITERION (a)(1). CRITERION (a)(2) IS NOT APPLICABLE FOR CRITERION (a)(3).

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

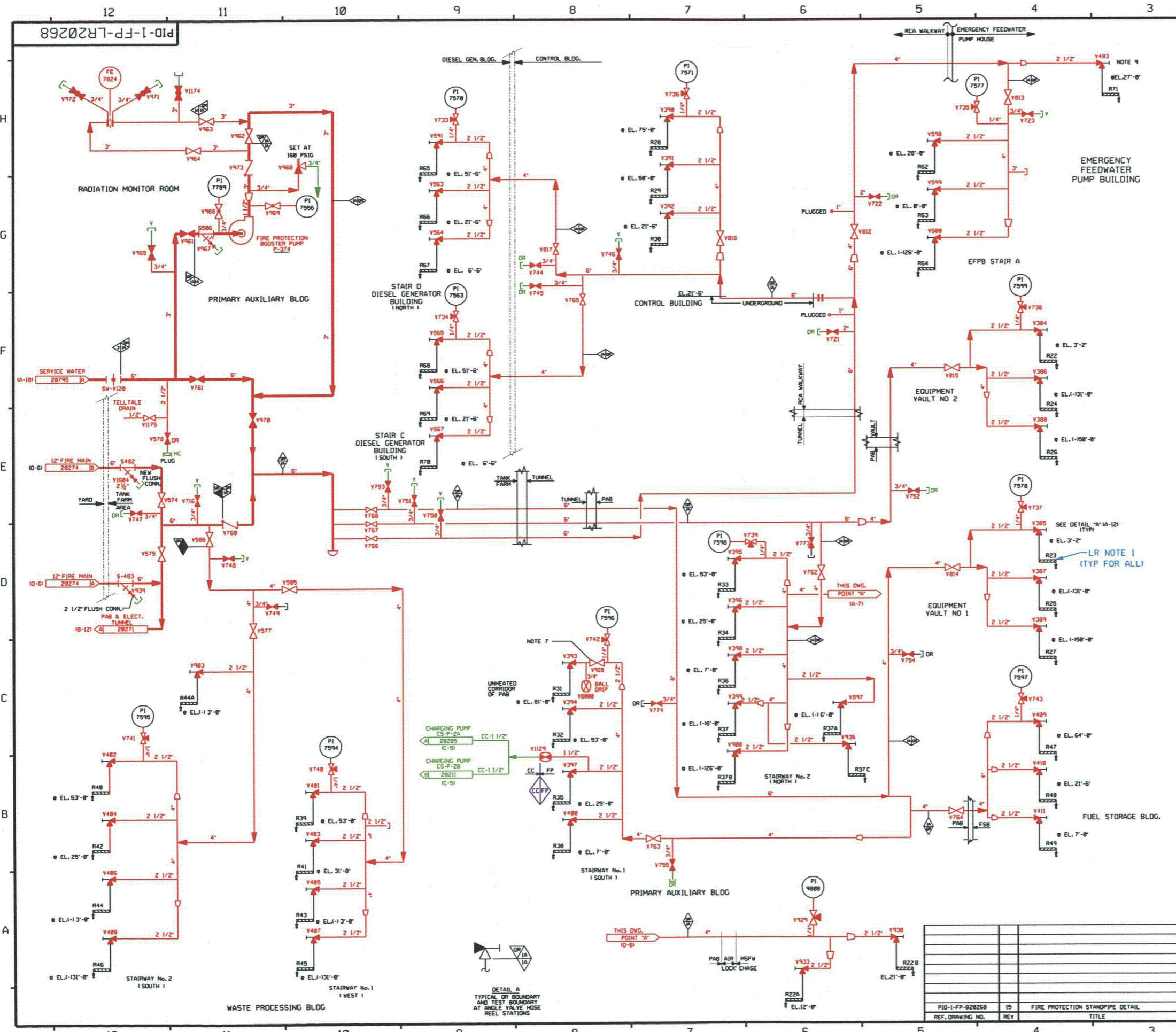
▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

NOTES:
 1. THE FO IS A ONE DWG. SYSTEM AND AN OVERVIEW IS NOT REQUIRED.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX FO UNLESS NOTED.
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NMS UNLESS NOTED.



REF. DRAWING NO.	4	TITLE	FUEL OIL SYSTEM
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			
REVISION			

ORIGINAL ISSUE					
REY	DATE	DSGN	CHKD	CE	DESCRIPTION
FUEL OIL SYSTEM LICENSE RENEWAL P&ID					
PID-1-FO-LR20938					



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
 1. PER NEI 95-10 REVISION 6 TABLE 4.1-2, FIRE HOSE ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL AS THEY ARE CONSIDERED CONSUMABLES AND ARE REPLACED ON CONDITION.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.41(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.41(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 CC - PRIMARY COMPONENT COOLING SYSTEM
 FP - FIRE PROTECTION SYSTEM
 SW - SERVICE WATER SYSTEM

NOTES:
 1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE PREFIXED 'FP', UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20254, 20266, 20267 & 20269 THRU 20275, UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.
 5. DELETED
 6. DELETED
 7. VALVE 929 TO BE NORMALLY CLOSED DURING PERIODS OF FREEZING TEMP. HOSE RACK 31 IS DRY STANDPIPE DURING THESE PERIODS.
 8. VENTS, DRAINS & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
 9. CONNECTION FOR EMERGENCY MAKE-UP TO CST USING TEMPORARY HOSE (CO-20426 G-7)

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

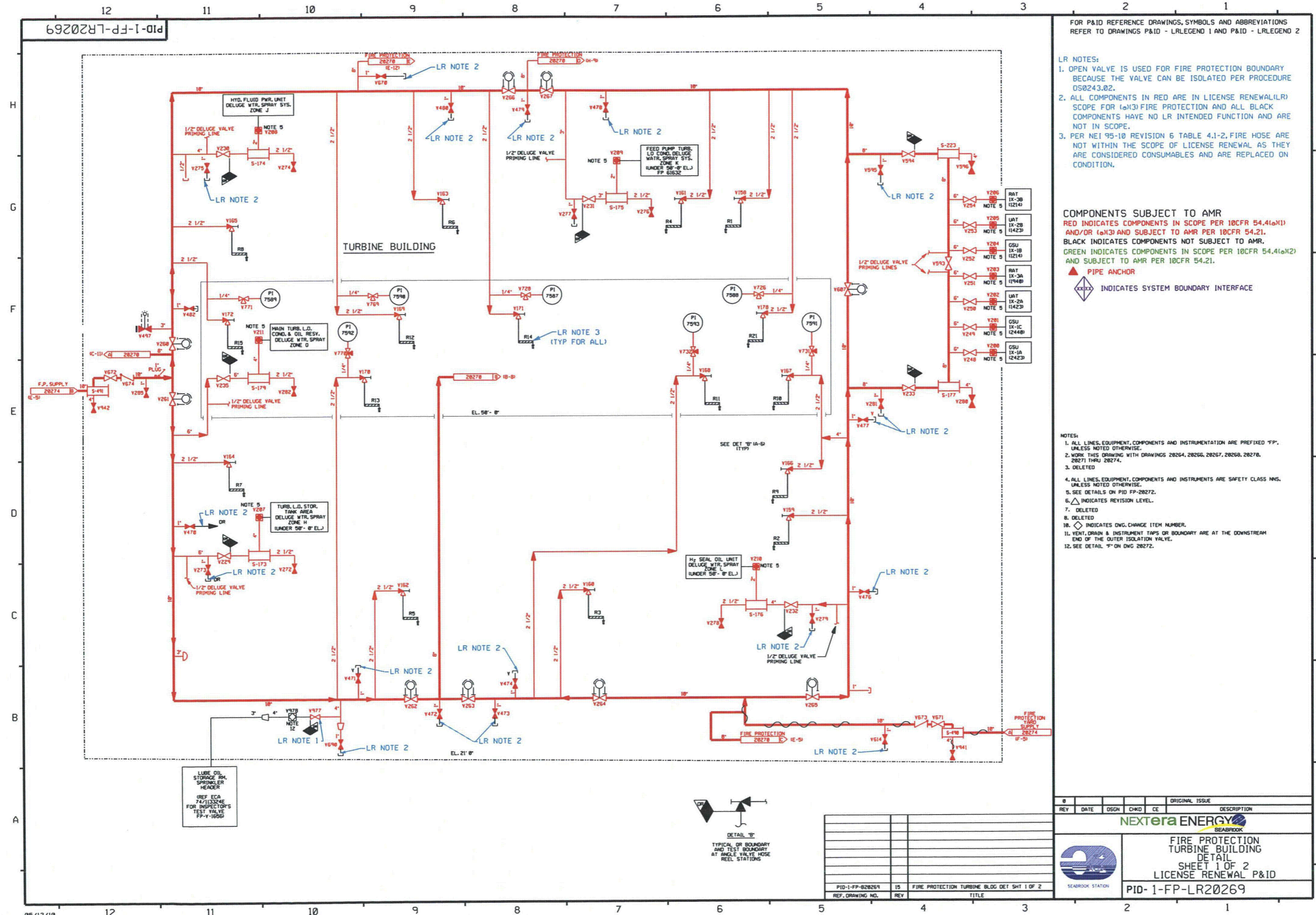
FIRE PROTECTION STANDPIPE DETAIL
LICENSE RENEWAL P&ID

PID-1-FP-LR20268



PID-1-FP-20268	15	FIRE PROTECTION STANDPIPE DETAIL
REF. DRAWING NO.	REV	TITLE

PID-1-FP-LR20269



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. OPEN VALVE IS USED FOR FIRE PROTECTION BOUNDARY BECAUSE THE VALVE CAN BE ISOLATED PER PROCEDURE 050243.02.
 2. ALL COMPONENTS IN RED ARE IN LICENSE RENEWAL(LR) SCOPE FOR (a)(3) FIRE PROTECTION AND ALL BLACK COMPONENTS HAVE NO LR INTENDED FUNCTION AND ARE NOT IN SCOPE.
 3. PER NEI 95-10 REVISION 6 TABLE 4.1-2, FIRE HOSE ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL AS THEY ARE CONSIDERED CONSUMABLES AND ARE REPLACED ON CONDITION.

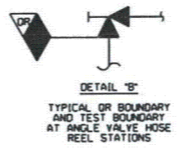
COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◇ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE PREFIXED 'FP', UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20264, 20266, 20267, 20268, 20270, 20271 THRU 20274.
 3. DELETED
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
 5. SEE DETAILS ON PID FP-20272.
 6. △ INDICATES REVISION LEVEL.
 7. DELETED
 8. DELETED
 10. ◇ INDICATES DWG. CHANGE ITEM NUMBER.
 11. VENT, DRAIN & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
 12. SEE DETAIL 'B' ON DWG 20272.

REV	DATE	DSGN	CHD	CE	ORIGINAL ISSUE	DESCRIPTION

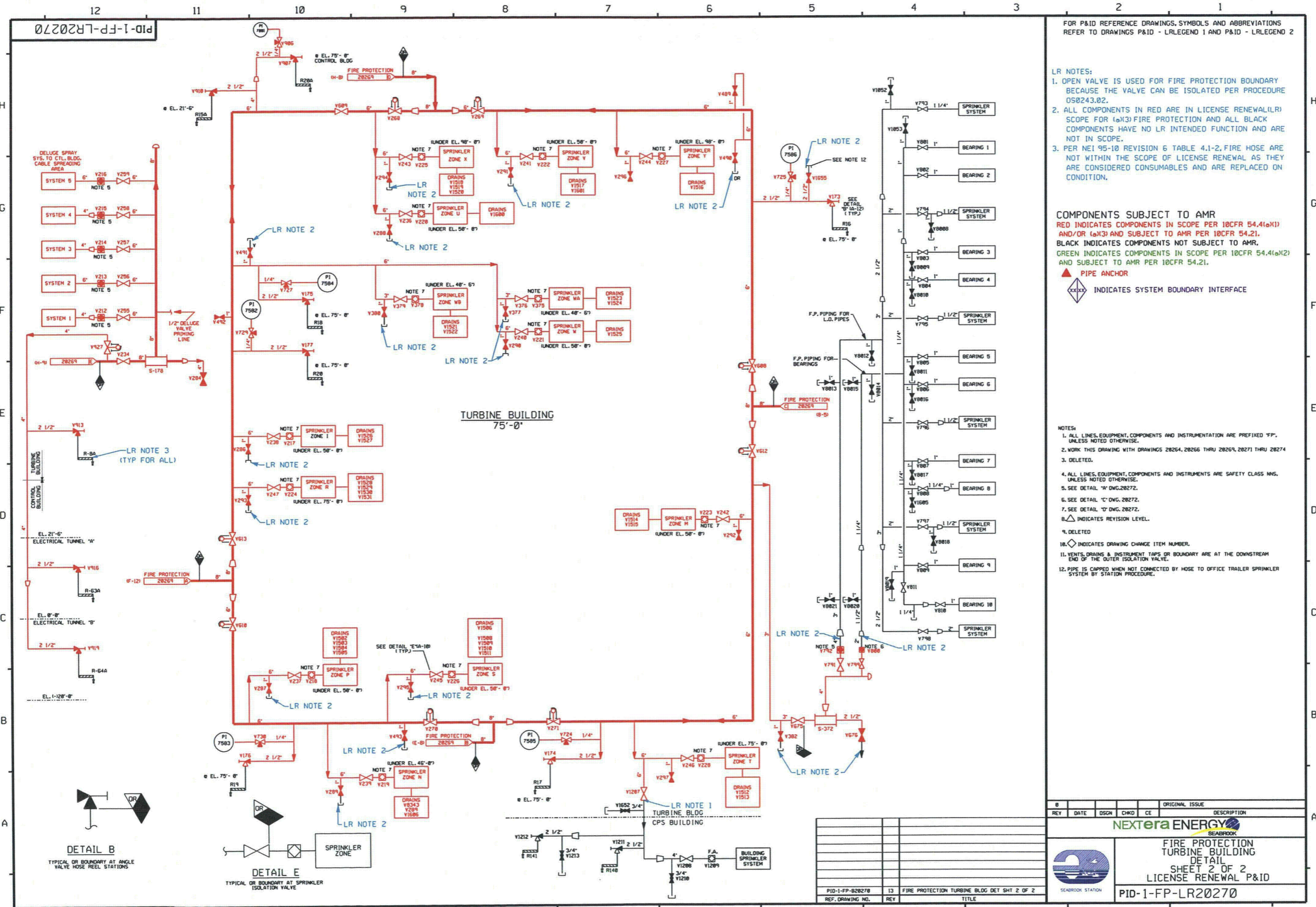
FIRE PROTECTION TURBINE BUILDING
DETAIL
SHEET 1 OF 2
LICENSE RENEWAL P&ID
 PID-1-FP-LR20269



PID-1-FP-020269	IS	FIRE PROTECTION TURBINE BLDG DET SHT 1 OF 2
REF. DRAWING NO.	REV	TITLE

05/12/10

PID-1-FP-LR20270



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. OPEN VALVE IS USED FOR FIRE PROTECTION BOUNDARY BECAUSE THE VALVE CAN BE ISOLATED PER PROCEDURE 050243.02.
 2. ALL COMPONENTS IN RED ARE IN LICENSE RENEWAL(LR) SCOPE FOR (a)(3) FIRE PROTECTION AND ALL BLACK COMPONENTS HAVE NO LR INTENDED FUNCTION AND ARE NOT IN SCOPE.
 3. PER NEI 95-10 REVISION 6 TABLE 4.1-2, FIRE HOSE ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL AS THEY ARE CONSIDERED CONSUMABLES AND ARE REPLACED ON CONDITION.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

- ▲ PIPE ANCHOR
- ◇ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE PREFIXED "FP", UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 28264, 28266 THRU 28269, 28271 THRU 28274
 3. DELETED.
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
 5. SEE DETAIL "A" DWG. 28272.
 6. SEE DETAIL "C" DWG. 28272.
 7. SEE DETAIL "D" DWG. 28272.
 8. △ INDICATES REVISION LEVEL.
 9. DELETED
 10. ◇ INDICATES DRAWING CHANGE ITEM NUMBER.
 11. VENTS, DRAINS & INSTRUMENT TAPS OR BOUNDARY ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE.
 12. PIPE IS CAPPED WHEN NOT CONNECTED BY HOSE TO OFFICE TRAILER SPRINKLER SYSTEM BY STATION PROCEDURE.

DETAIL B
 TYPICAL OR BOUNDARY AT ANGLE VALVE HOSE REEL STATIONS

DETAIL E
 TYPICAL OR BOUNDARY AT SPRINKLER ISOLATION VALVE

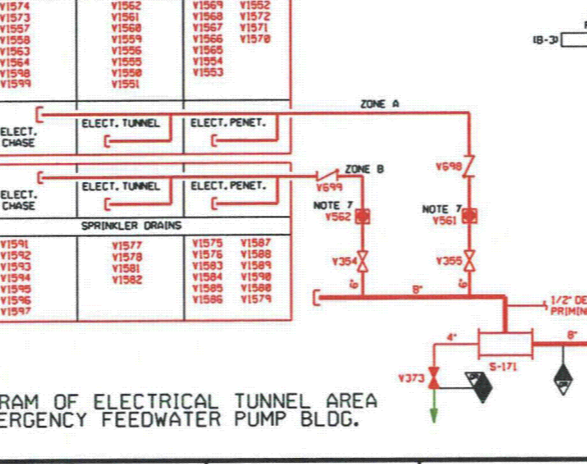
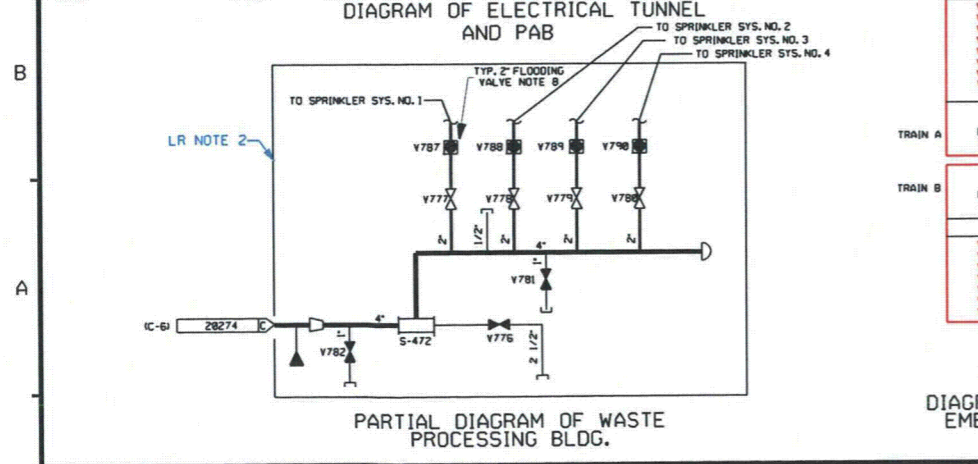
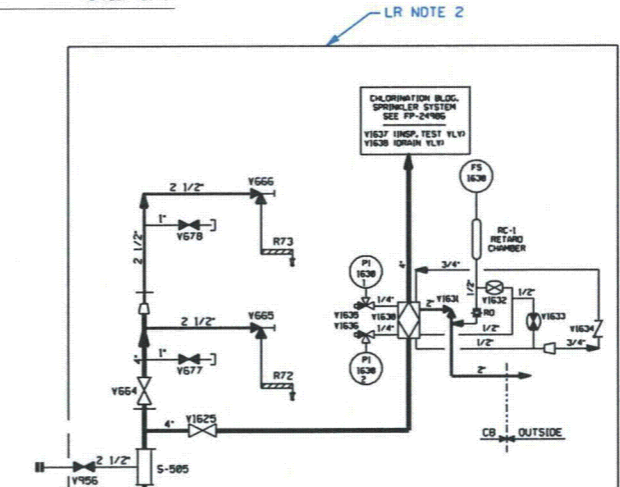
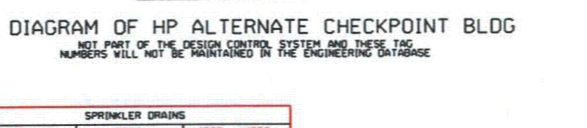
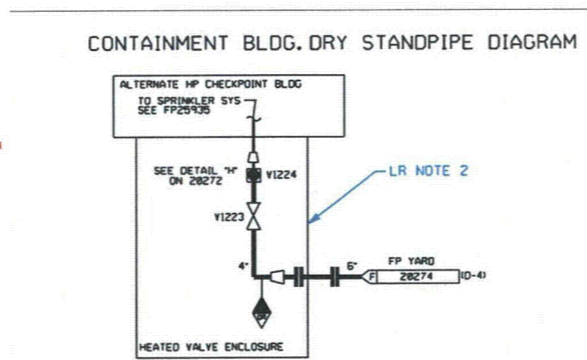
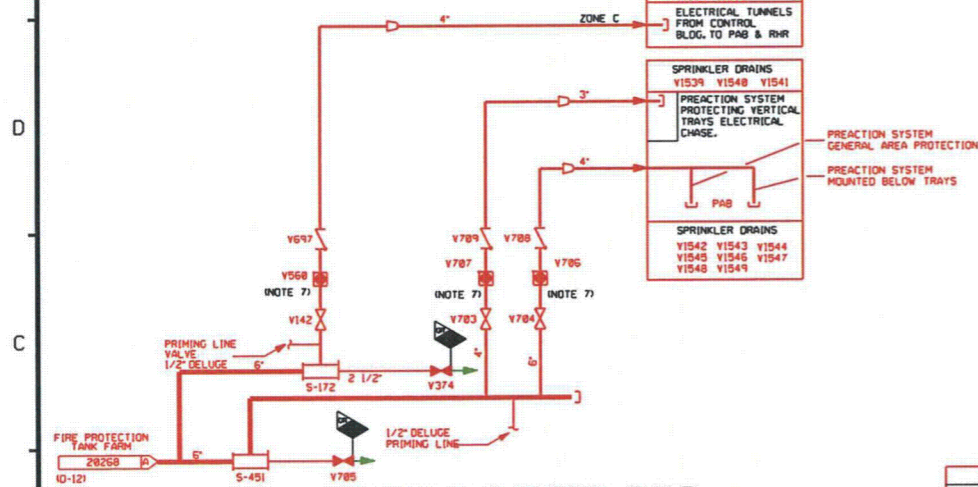
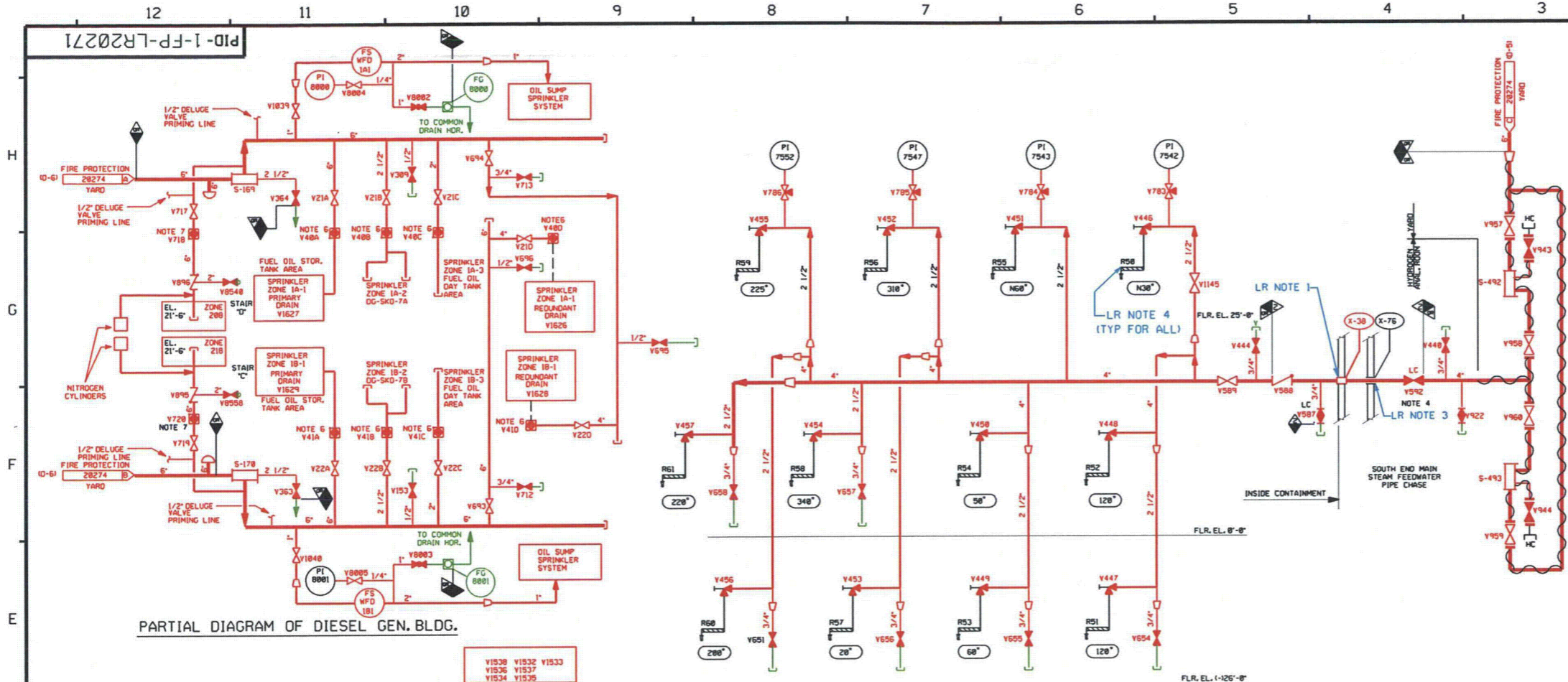
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

ORIGINAL ISSUE

NEXTERA ENERGY
 SEABROOK STATION

FIRE PROTECTION
 TURBINE BUILDING
 DETAIL
 SHEET 2 OF 2
 LICENSE RENEWAL P&ID

PID-1-FP-LR20270



- LR NOTES:**
1. COMPONENT DESIGNATED AS X-38 IS A CONTAINMENT PENETRATION THAT IS BEING EVALUATED UNDER THE CIVIL STRUCTURAL UNDER LRSP-CNT.
 2. THIS BUILDING AND/OR SYSTEM IS NOT IN LICENSE RENEWAL(LR) SCOPE BECAUSE IT CONTAINS NO SAFETY RELATED COMPONENTS.
 3. COMPONENT DESIGNATED AS X-76 IS A PIPE SLEEVE.
 4. PER NEI 95-10 REVISION 6 TABLE 4.1-2, FIRE HOSE ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL AS THEY ARE CONSIDERED CONSUMABLES AND ARE REPLACED ON CONDITION

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:**
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX FP, UNLESS NOTED OTHERWISE.
 2. DELETED
 3. DELETED
 4. STANDPIPE SYSTEM WITHIN CONTAINMENT SHALL BE DRAINED PRIOR TO OPERATION OF UNIT. VALVE MUST BE CLOSED IN MODE 1,2,3,4 AND CAN BE OPENED IN MODE 5, UNLESS NOTED OTHERWISE.
 5. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS INS, UNLESS NOTED OTHERWISE.
 6. SEE DETAIL A, DWG. 28272.
 7. SEE DETAIL B, DWG. 28272.
 8. SEE DETAIL C, DWG. 28272.
 9. △ INDICATES REVISION LEVEL.
 10. DELETED
 11. DELETED
 12. DELETED
 13. DELETED
 14. DELETED

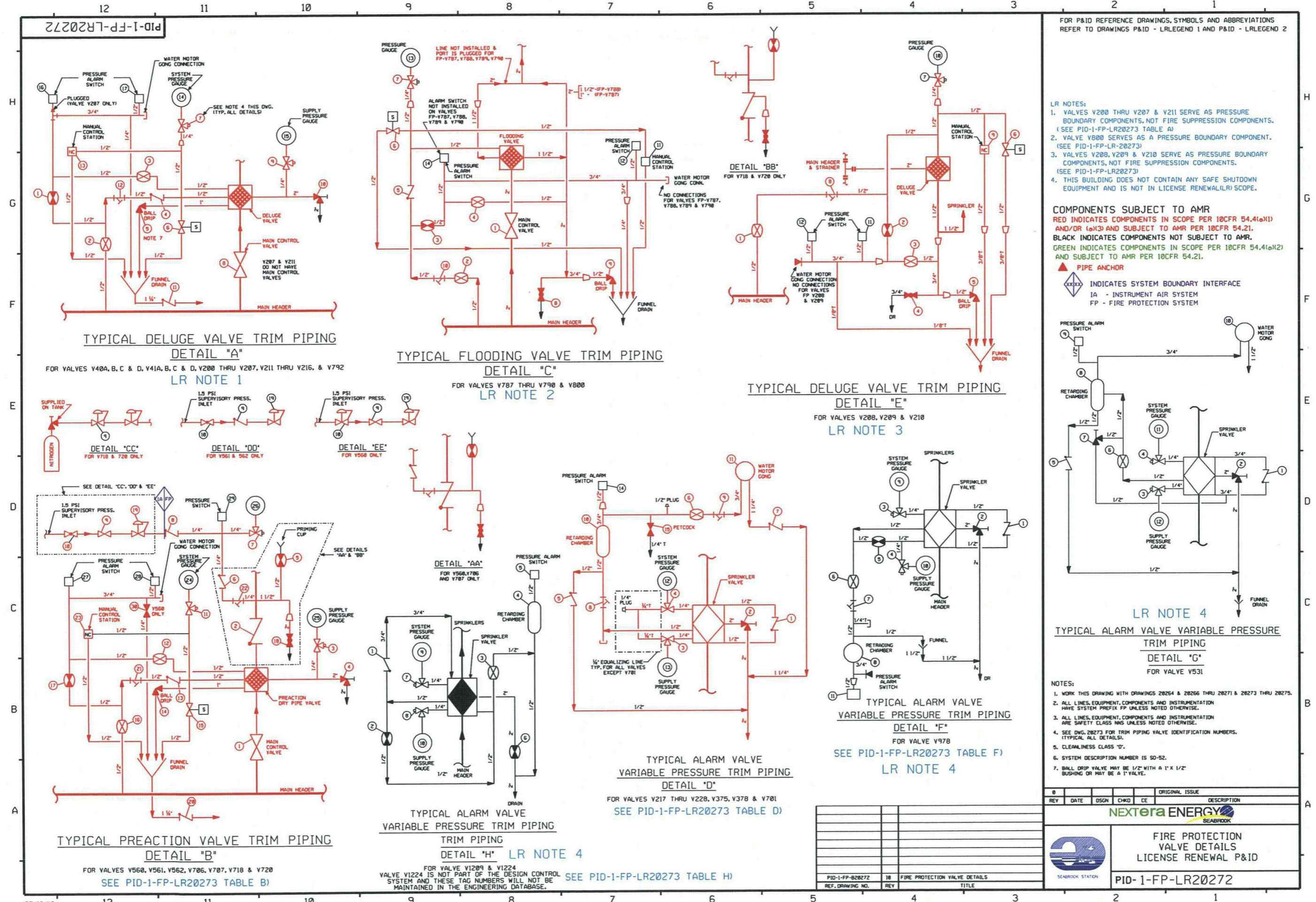
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	OSCH	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
 SEABROOK STATION

FIRE PROTECTION DETAILS LICENSE RENEWAL P&ID

PID-1-FP-LR20271

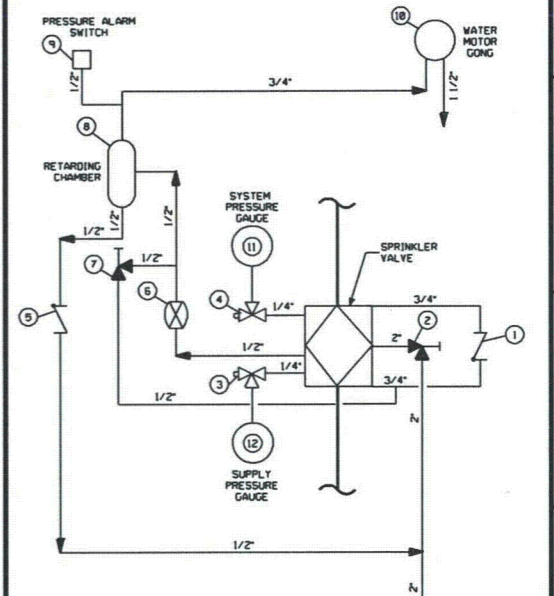


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. VALVES V200 THRU V207 & V211 SERVE AS PRESSURE BOUNDARY COMPONENTS, NOT FIRE SUPPRESSION COMPONENTS. (SEE PID-1-FP-LR20273 TABLE A)
 2. VALVE V800 SERVES AS A PRESSURE BOUNDARY COMPONENT. (SEE PID-1-FP-LR-20273)
 3. VALVES V208, V209 & V210 SERVE AS PRESSURE BOUNDARY COMPONENTS, NOT FIRE SUPPRESSION COMPONENTS. (SEE PID-1-FP-LR20273)
 4. THIS BUILDING DOES NOT CONTAIN ANY SAFE SHUTDOWN EQUIPMENT AND IS NOT IN LICENSE RENEWAL(LR) SCOPE.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 IA - INSTRUMENT AIR SYSTEM
 FP - FIRE PROTECTION SYSTEM



LR NOTE 4
 TYPICAL ALARM VALVE VARIABLE PRESSURE TRIM PIPING
 DETAIL "G"
 FOR VALVE V531

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20254 & 20256 THRU 20271 & 20273 THRU 20275.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX FP UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE SAFETY CLASS NMS UNLESS NOTED OTHERWISE.
 4. SEE DWG. 20273 FOR TRIM PIPING VALVE IDENTIFICATION NUMBERS. (TYPICAL ALL DETAILS).
 5. CLEANLINESS CLASS "D".
 6. SYSTEM DESCRIPTION NUMBER IS SD-52.
 7. BALL DRIP VALVE MAY BE 1/2" WITH A 1" x 1/2" BUSHING OR MAY BE A 1" VALVE.

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

**FIRE PROTECTION VALVE DETAILS
LICENSE RENEWAL P&ID**

PID-1-FP-LR20272

DETAIL 'A' DELUGE VALVE TRIM PIPING VLV. ID NOS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
484	8822	8823	8824	8825	8826	8827	8828	8829	8830	8831	8832	8833	8834	8835	8836	8837
485	8838	8839	8840	8841	8842	8843	8844	8845	8846	8847	8848	8849	8850	8851	8852	8853
486	8854	8855	8856	8857	8858	8859	8860	8861	8862	8863	8864	8865	8866	8867	8868	8869
487	8870	8871	8872	8873	8874	8875	8876	8877	8878	8879	8880	8881	8882	8883	8884	8885
488	8886	8887	8888	8889	8890	8891	8892	8893	8894	8895	8896	8897	8898	8899	8900	8901
489	8902	8903	8904	8905	8906	8907	8908	8909	8910	8911	8912	8913	8914	8915	8916	8917
490	8918	8919	8920	8921	8922	8923	8924	8925	8926	8927	8928	8929	8930	8931	8932	8933
491	8934	8935	8936	8937	8938	8939	8940	8941	8942	8943	8944	8945	8946	8947	8948	8949
492	8950	8951	8952	8953	8954	8955	8956	8957	8958	8959	8960	8961	8962	8963	8964	8965
493	8966	8967	8968	8969	8970	8971	8972	8973	8974	8975	8976	8977	8978	8979	8980	8981
494	8982	8983	8984	8985	8986	8987	8988	8989	8990	8991	8992	8993	8994	8995	8996	8997
495	8998	8999	9000	9001	9002	9003	9004	9005	9006	9007	9008	9009	9010	9011	9012	9013
496	9014	9015	9016	9017	9018	9019	9020	9021	9022	9023	9024	9025	9026	9027	9028	9029
497	9030	9031	9032	9033	9034	9035	9036	9037	9038	9039	9040	9041	9042	9043	9044	9045
498	9046	9047	9048	9049	9050	9051	9052	9053	9054	9055	9056	9057	9058	9059	9060	9061
499	9062	9063	9064	9065	9066	9067	9068	9069	9070	9071	9072	9073	9074	9075	9076	9077
500	9078	9079	9080	9081	9082	9083	9084	9085	9086	9087	9088	9089	9090	9091	9092	9093
501	9094	9095	9096	9097	9098	9099	9100	9101	9102	9103	9104	9105	9106	9107	9108	9109
502	9110	9111	9112	9113	9114	9115	9116	9117	9118	9119	9120	9121	9122	9123	9124	9125
503	9126	9127	9128	9129	9130	9131	9132	9133	9134	9135	9136	9137	9138	9139	9140	9141
504	9142	9143	9144	9145	9146	9147	9148	9149	9150	9151	9152	9153	9154	9155	9156	9157
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520	9398	9399	9400	9401	9402	9403	9404	9405	9406	9407	9408	9409	9410	9411	9412	9413
521	9414	9415	9416	9417	9418	9419	9420	9421	9422	9423	9424	9425	9426	9427	9428	9429
522	9430	9431	9432	9433	9434	9435	9436	9437	9438	9439	9440	9441	9442	9443	9444	9445
523	9446	9447	9448	9449	9450	9451	9452	9453	9454	9455	9456	9457	9458	9459	9460	9461
524	9462	9463	9464	9465	9466	9467	9468	9469	9470	9471	9472	9473	9474	9475	9476	9477
525	9478	9479	9480	9481	9482	9483	9484	9485	9486	9487	9488	9489	9490	9491	9492	9493
526	9494	9495	9496	9497	9498	9499	9500	9501	9502	9503	9504	9505	9506	9507	9508	9509
527	9510	9511	9512	9513	9514	9515	9516	9517	9518	9519	9520	9521	9522	9523	9524	9525
528	9526	9527	9528	9529	9530	9531	9532	9533	9534	9535	9536	9537	9538	9539	9540	9541
529	9542	9543	9544	9545	9546	9547	9548	9549	9550	9551	9552	9553	9554	9555	9556	9557
530	9558	9559	9560	9561	9562	9563	9564	9565	9566	9567	9568	9569	9570	9571	9572	9573
531	9574	9575	9576	9577	9578	9579	9580	9581	9582	9583	9584	9585	9586	9587	9588	9589
532	9590	9591	9592	9593	9594	9595	9596	9597	9598	9599	9600	9601	9602	9603	9604	9605
533	9606	9607	9608	9609	9610	9611	9612	9613	9614	9615	9616	9617	9618	9619	9620	9621
534	9622	9623	9624	9625	9626	9627	9628	9629	9630	9631	9632	9633	9634	9635	9636	9637
535	9638	9639	9640	9641	9642	9643	9644	9645	9646	9647	9648	9649	9650	9651	9652	9653
536	9654	9655	9656	9657	9658	9659	9660	9661	9662	9663	9664	9665	9666	9667	9668	9669
537	9670	9671	9672	9673	9674	9675	9676	9677	9678	9679	9680	9681	9682	9683	9684	9685
538	9686	9687	9688	9689	9690	9691	9692	9693	9694	9695	9696	9697	9698	9699	9700	9701
539	9702	9703	9704	9705	9706	9707	9708	9709	9710	9711	9712	9713	9714	9715	9716	9717
540	9718	9719	9720	9721	9722	9723	9724	9725	9726	9727	9728	9729	9730	9731	9732	9733
541	9734	9735	9736	9737	9738	9739	9740	9741	9742	9743	9744	9745	9746	9747	9748	9749
542	9750	9751	9752	9753	9754	9755	9756	9757	9758	9759	9760	9761	9762	9763	9764	9765
543	9766	9767	9768	9769	9770	9771	9772	9773	9774	9775	9776	9777	9778	9779	9780	9781
544	9782	9783	9784	9785	9786	9787	9788	9789	9790	9791	9792	9793	9794	9795	9796	9797
545	9798	9799	9800	9801	9802	9803	9804	9805	9806	9807	9808	9809	9810	9811	9812	9813
546	9814	9815	9816	9817	9818	9819	9820	9821	9822	9823	9824	9825	9826	9827	9828	9829
547	9830	9831	9832	9833	9834	9835	9836	9837	9838	9839	9840	9841	9842	9843	9844	9845
548	9846	9847	9848	9849	9850	9851	9852	9853	9854	9855	9856	9857	9858	9859	9860	9861
549	9862	9863	9864	9865	9866	9867	9868	9869	9870	9871	9872	9873	9874	9875	9876	9877
550	9878	9879	9880	9881	9882	9883	9884	9885	9886	9887	9888	9889	9890	9891	9892	9893
551	9894	9895	9896	9897	9898	9899	9900	9901	9902	9903	9904	9905	9906	9907	9908	9909
552	9910	9911	9912	9913	9914	9915	9916	9917	9918	9919	9920	9921	9922	9923	9924	9925
553	9926	9927	9928	9929	9930	9931	9932	9933	9934	9935	9936	9937	9938	9939	9940	9941
554	9942	9943	9944	9945	9946	9947	9948	9949	9950	9951	9952	9953	9954	9955	9956	9957
555	9958	9959	9960	9961	9962	9963	9964	9965	9966	9967	9968	9969	9970	9971	9972	9973
556	9974	9975	9976	9977	9978	9979	9980	9981	9982	9983	9984	9985	9986	9987	9988	9989
557	9990	9991	9992	9993	9994	9995	9996	9997	9998	9999	10000					

DETAIL 'A' TRIM PIPING VALVE TABULATION

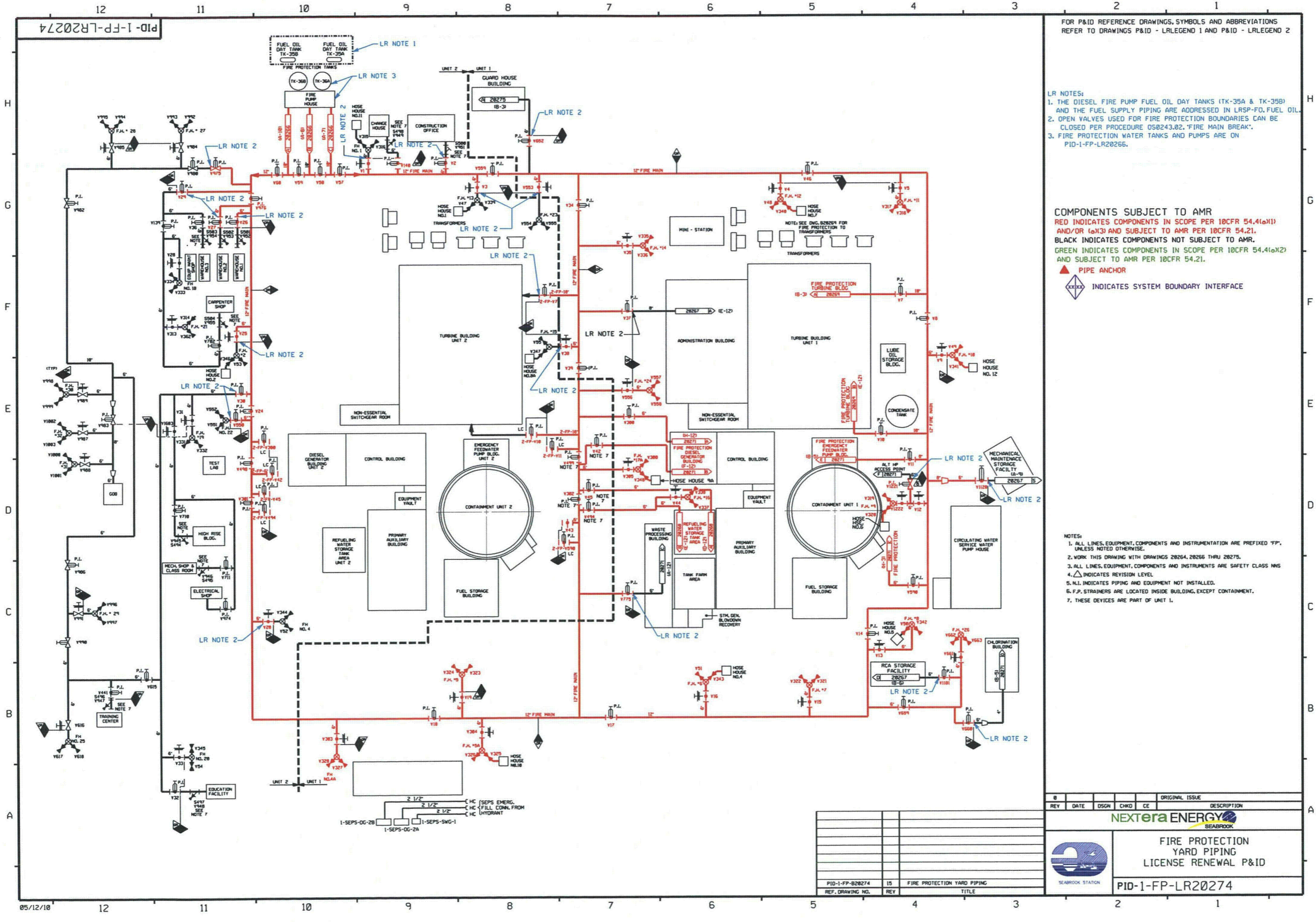
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
C-12	C-12	C-12	C-11	C-12	C-11	H-11	F-11	C-10	C-10	F-11	C-12	H-12	H-11	H-10	H-12	H-12

LR NOTE 2

DETAIL 'C' FLOODING VALVE TRIM PIPING VLV. ID NOS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
7													

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2



- LR NOTES:
1. THE DIESEL FIRE PUMP FUEL OIL DAY TANKS (TK-35A & TK-35B) AND THE FUEL SUPPLY PIPING ARE ADDRESSED IN LRSP-FD, FUEL OIL.
 2. OPEN VALVES USED FOR FIRE PROTECTION BOUNDARIES CAN BE CLOSED PER PROCEDURE OS0243.02, 'FIRE MAIN BREAK'.
 3. FIRE PROTECTION WATER TANKS AND PUMPS ARE ON PID-1-FP-LR20266.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
 ▲ PIPE ANCHOR
 ◇◇◇◇ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE PREFIXED 'FP', UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20264, 20265 THRU 20275.
 3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS.
 4. ▲ INDICATES REVISION LEVEL.
 5. N.I. INDICATES PIPING AND EQUIPMENT NOT INSTALLED.
 6. F.P. STRAINERS ARE LOCATED INSIDE BUILDING, EXCEPT CONTAINMENT.
 7. THESE DEVICES ARE PART OF UNIT 1.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

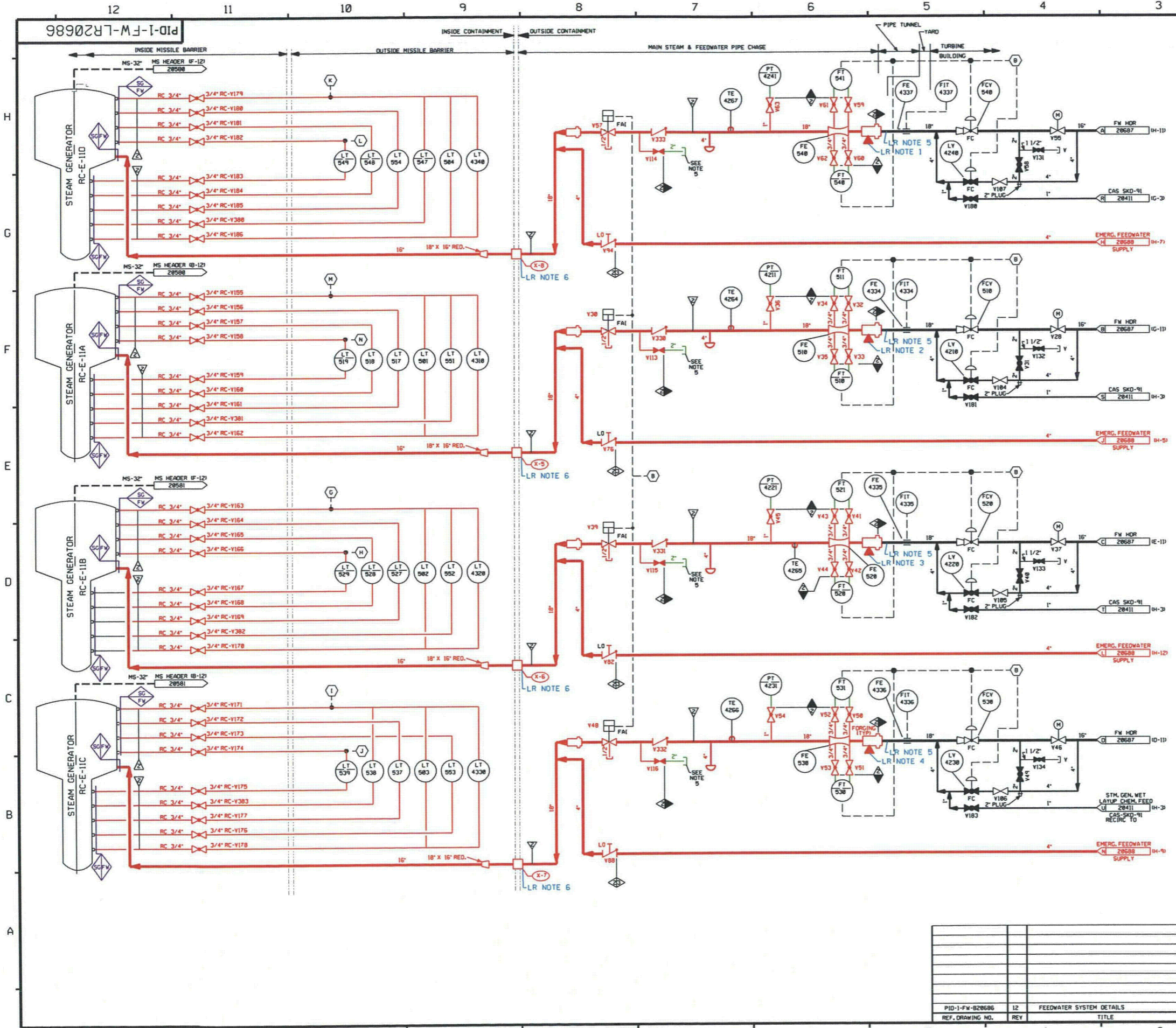
ORIGINAL ISSUE

FIRE PROTECTION YARD PIPING LICENSE RENEWAL P&ID

PID-1-FP-LR20274

REF. DRAWING NO.	REV	TITLE
PID-1-FP-B20274	15	FIRE PROTECTION YARD PIPING

89B02R-LM-LR20686



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
◇◇◇◇ INDICATES SYSTEM BOUNDARY INTERFACE
 FW - FEEDWATER
 SG - STEAM GENERATOR

- NOTES:
1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NOS. ARE PREFIXED BY DESIGNATION "1-FW", UNLESS OTHERWISE NOTED.
 2. WORK THIS DNG. WITH 20684, 20685, 20687 & 20688.
 3. INSTRUMENT IDENTIFICATION
 - (B) PROTECTION SYS. FW ISOLATION SIGNAL.
 - (D) TO FT-523 ON DNG. 1-MS-20581
 - (H) TO FT-522 ON DNG. 1-MS-20581
 - (I) TO FT-533 ON DNG. 1-MS-20581
 - (J) TO FT-532 ON DNG. 1-MS-20581
 - (K) TO FT-542 ON DNG. 1-MS-20580
 - (L) TO FT-543 ON DNG. 1-MS-20580
 - (M) TO FT-512 ON DNG. 1-MS-20580
 - (N) TO FT-513 ON DNG. 1-MS-20580
 4. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-MHY-985111, UNLESS NOTED OTHERWISE.
 5. CONNECTION USED FOR PRE-PLANNED MAKEUP STRATEGY. SEE FP9988.

- LR NOTES:
1. PIPE SUPPORT EQUIVALENT ANCHOR
 ISO NO: 1-FW-4609-14
 HANGER NO: 4609-SG-9
 CALC NO: MCD 480.12A
 2. PIPE SUPPORT EQUIVALENT ANCHOR
 ISO NO: 1-FW-4605-12
 HANGER NO: 4605-SG-9
 CALC NO: MCD 480.12A
 3. PIPE SUPPORT EQUIVALENT ANCHOR
 ISO NO: 1-FW-4607-12
 HANGER NO: 4607-SG-10
 CALC: MCD 480.12A
 4. PIPE SUPPORT EQUIVALENT ANCHOR
 ISO NO: 1-FW-4608-14
 HANGER NO: 4608-SG-10
 CALC: MCD 480.12A
 5. PIPING DOWNSTREAM OF FORGINGS IN THE YARD AND TURBINE BUILDING HAVE NO LICENSE RENEWAL INTENDED FUNCTION THEREFORE THESE COMPONENTS ARE NOT IN LICENSE RENEWAL SCOPE.
 6. COMPONENTS DESIGNATED AS X-5, 6, 7 & 8 CONTAINMENT PENETRATIONS THAT ARE EVALUTATED UNDER CIVIL/ STRUCTURAL LRSP-CNT.

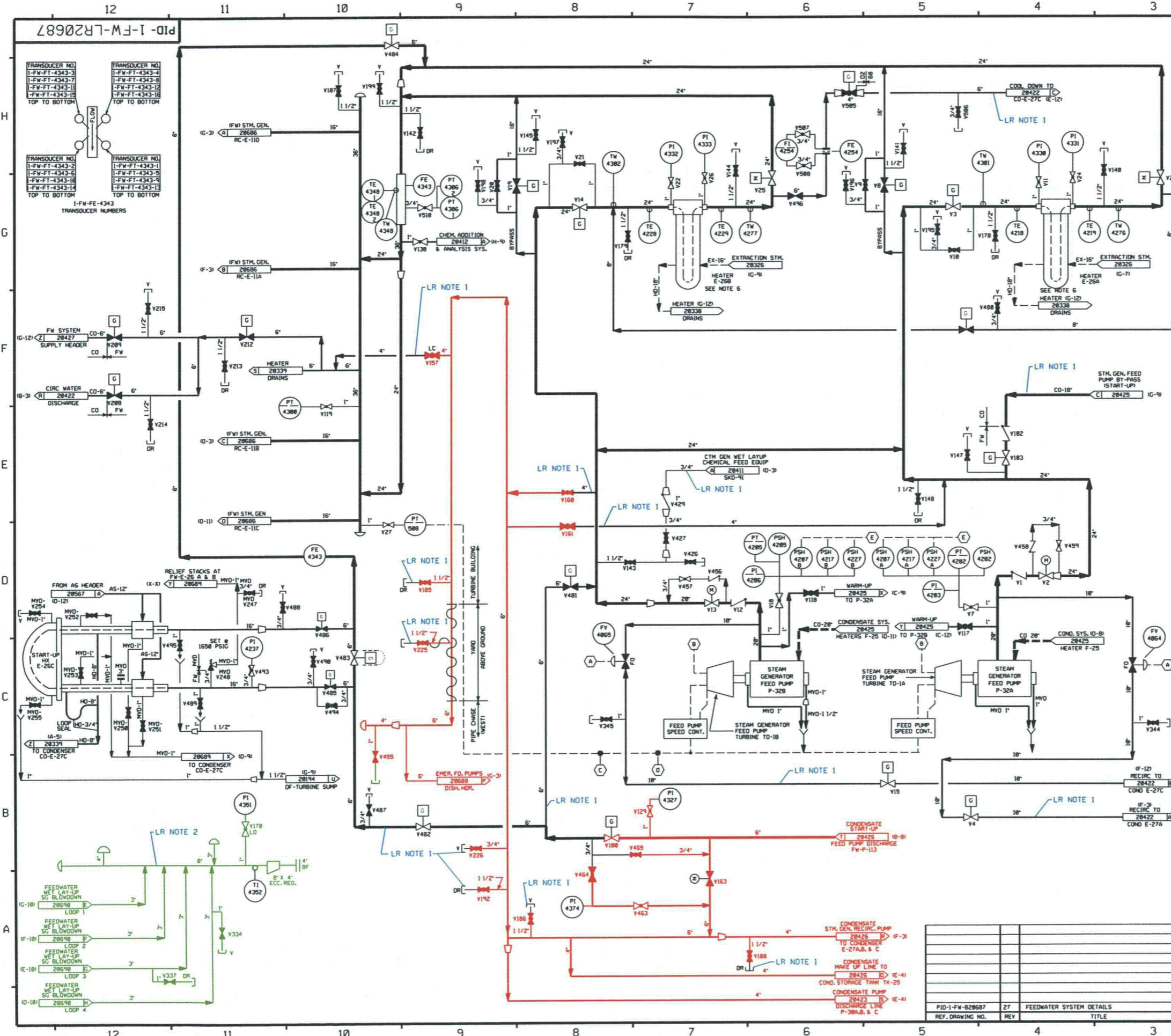
REV	DATE	OSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

FEEDWATER SYSTEM
DETAILS
LICENSE RENEWAL P&ID

PID- 1-FW-LR20686





FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
 1. ALL COMPONENTS IN BLACK ARE LOCATED IN THE TURBINE BUILDING AND YARD AND HAVE NO LICENSE RENEWAL INTENDED FUNCTION SO THEY ARE NOT IN SCOPE FOR LICENSE RENEWAL. THE RED COMPONENTS ARE IN SCOPE FOR CRITERION (a)(3).
 2. THE GREEN COMPONENTS ARE LOCATED IN THE WEST PIPE CHASE BUILDING AND ARE IN SCOPE PER CRITERION (a)(2).

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
 ▲ PIPE ANCHOR
 ◇◇◇◇ INDICATES SYSTEM BOUNDARY INTERFACE

NOTES:
 1. WORK THIS DRAWING WITH 20684 THRU 20686 & 20688, 20689 & 20790.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 'FW', UNLESS OTHERWISE NOTED.
 3. INSTRUMENT REFERENCES:
 (A) FEEDWATER PUMP FLOW (LOW)
 (B) PROTECTION SYS. FW ISOLATION SIGNAL
 (C) MAIN STEAM HEADER PRESSURE
 (D) TOTAL STEAM FLOW
 (E) TRIPS FEEDWATER PUMPS ON 2/3 HIGH PRESSURE
 4. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS OTHERWISE NOTED.
 5. ▲ INDICATES REVISION LEVEL.
 6. FOR OTHER NOZZLES ON HEATERS 1-FW-E-26A/B SEE PID'S:
 EX-20326
 FW-20689
 HD-20338
 HD-20475

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

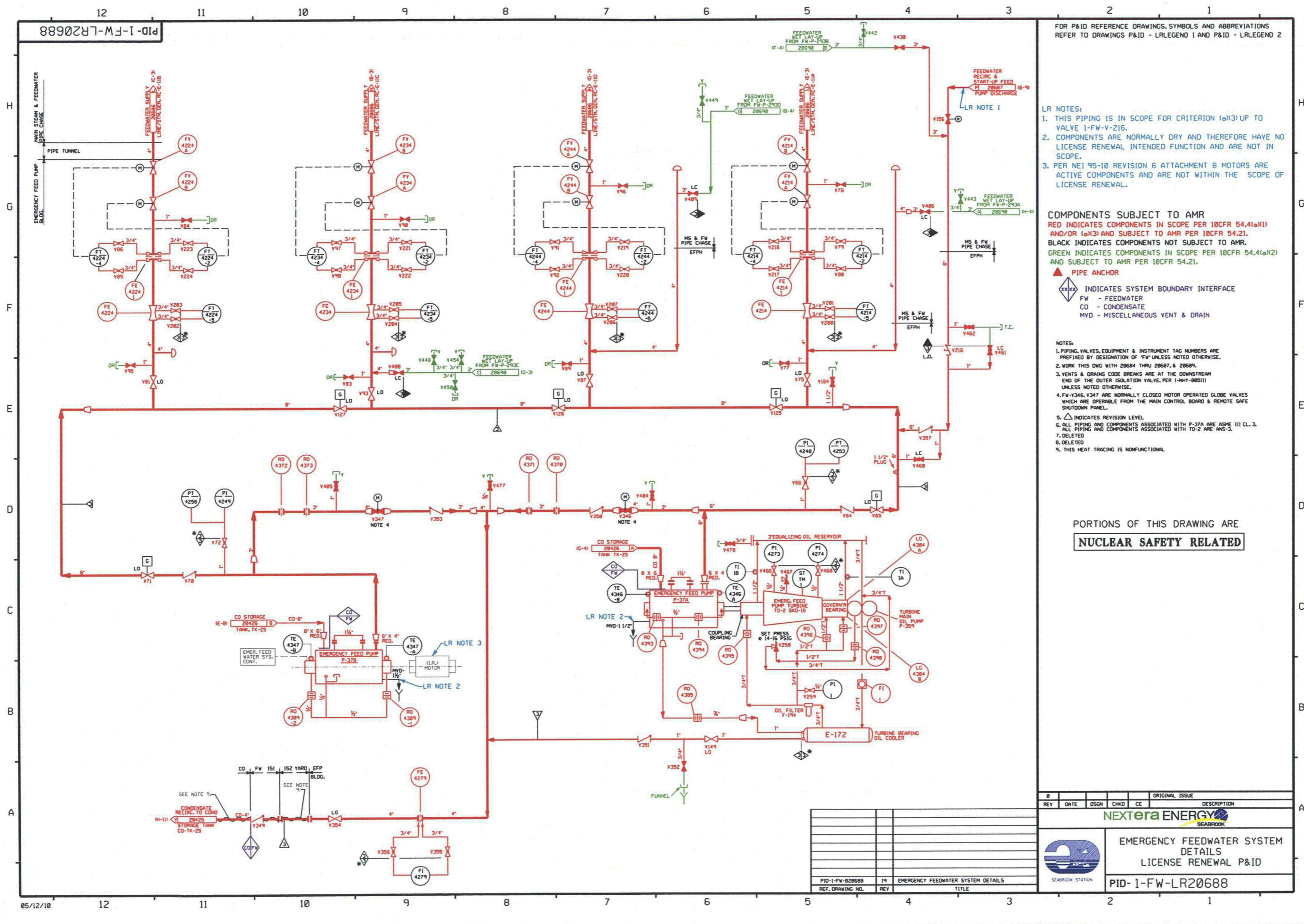
NEXTERA ENERGY
SEABROOK

**FEEDWATER SYSTEM
DETAILS
LICENSE RENEWAL P&ID**

PID-1-FW-LR20687



8890ZRL-MJ-01
PID-1-FW-LR20688



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. THIS PIPING IS IN SCOPE FOR CRITERION (a)(3) UP TO VALVE 1-FW-V216.
 2. COMPONENTS ARE NORMALLY DRY AND THEREFORE HAVE NO LICENSE RENEWAL INTENDED FUNCTION AND ARE NOT IN SCOPE.
 3. PER NEI 95-10 REVISION 6 ATTACHMENT B MOTORS ARE ACTIVE COMPONENTS AND ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL.

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 FW - FEEDWATER
 CO - CONDENSATE
 MVD - MISCELLANEOUS VENT & DRAIN

- NOTES:
1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NUMBERS ARE PREFIXED BY DESIGNATION OF "FW" UNLESS NOTED OTHERWISE.
 2. WORK THIS DWG WITH 20684 THRU 20687, & 20689.
 3. VENTS & DRAINS CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE, PER 1-NM-089111 UNLESS NOTED OTHERWISE.
 4. FW-Y346, Y347 ARE NORMALLY CLOSED MOTOR OPERATED GLOBE VALVES WHICH ARE OPERABLE FROM THE MAIN CONTROL BOARD & REMOTE SAFE SHUTDOWN PANEL.
 5. ▲ INDICATES REVISION LEVEL.
 6. ALL PIPING AND COMPONENTS ASSOCIATED WITH P-37A ARE ASME III CL. 3.
 7. ALL PIPING AND COMPONENTS ASSOCIATED WITH T0-2 ARE ANSI-3.
 7. DELETED
 8. DELETED
 9. THIS HEAT TRACING IS NONFUNCTIONAL.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

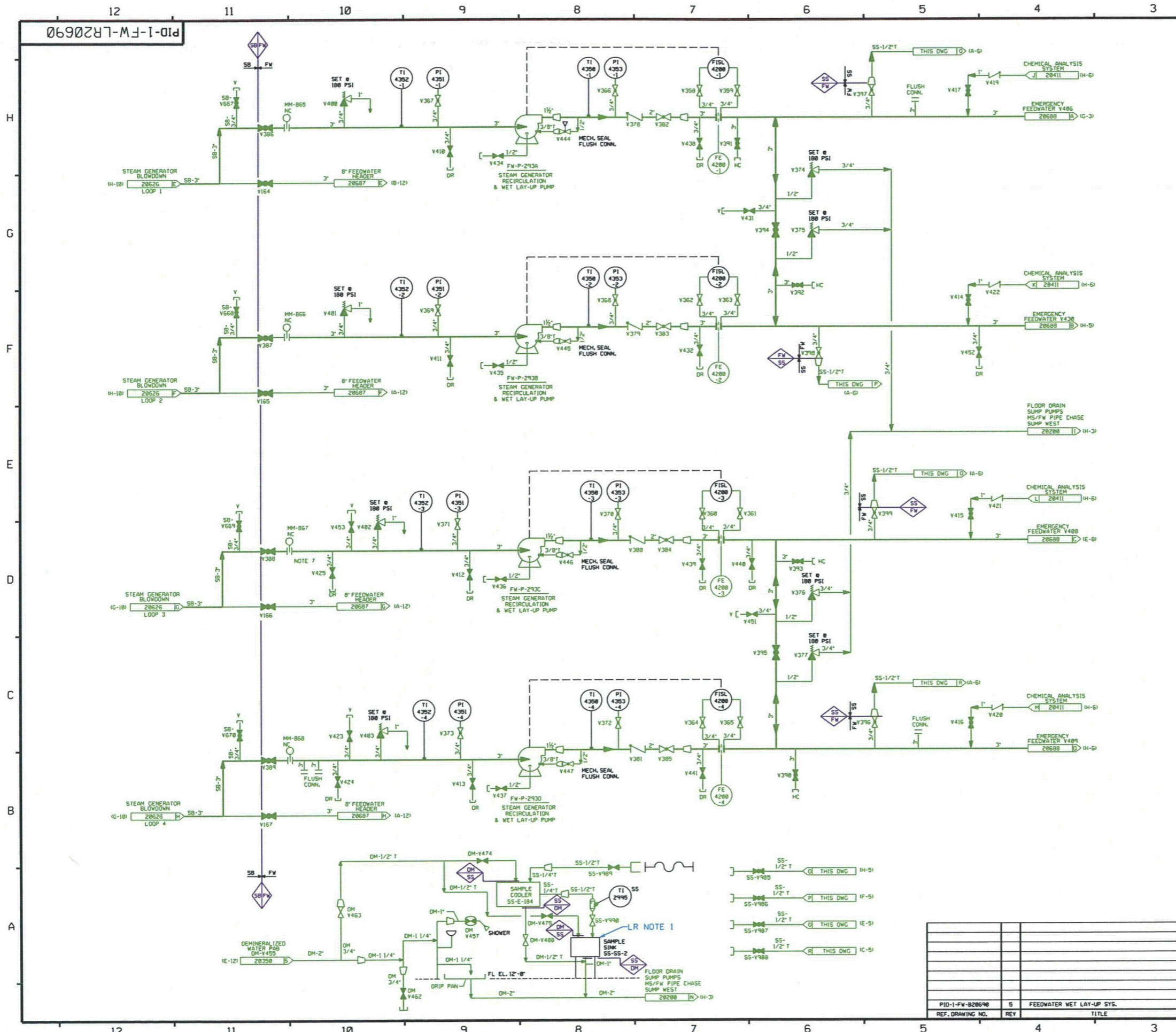
EMERGENCY FEEDWATER SYSTEM
 DETAILS
 LICENSE RENEWAL P&ID

SEABROOK STATION

PID-1-FW-B20688	19	EMERGENCY FEEDWATER SYSTEM DETAILS
REF. DRAWING NO.	REV	TITLE

PID-1-FW-LR20688

PID-1-FW-LR20690



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
 1. SAMPLE SINK IS ONLY IN USE DURING PLANT SHUTDOWN THEREFORE IT HAS NO LICENSE RENEWAL INTENDED FUNCTION AND IS NOT IN SCOPE.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 FW - FEEDWATER SYSTEM
 SB - STEAM GENERATOR BLOWDOWN SYSTEM
 SS - SAMPLE SYSTEM
 DM - DEMINERALIZED WATER SYSTEM

NOTE
 1. PIPING, VALVES, EQUIPMENT & INSTRUMENT TAG NOS ARE PREFIXED BY DESIGNATION FW, UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20684 THRU 20689.
 3. PIPING, VALVES, EQUIPMENT & INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
 4. ▲ INDICATES REVISION LEVEL.
 5. DELETED

LR NOTE 1

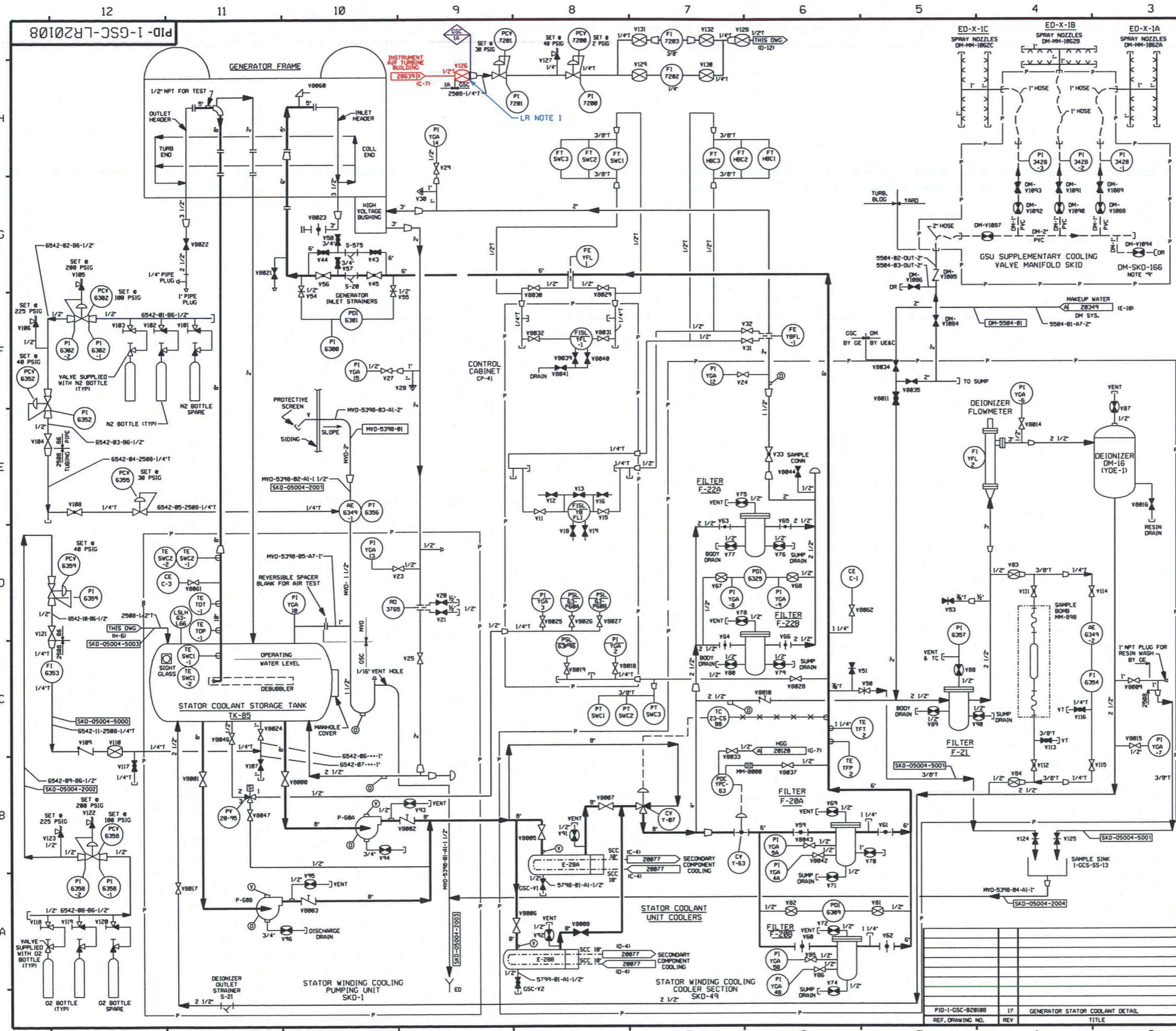
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

**FEEDWATER SYSTEM
WET LAY-UP
LICENSE RENEWAL P&ID**

PID-1-FW-LR20690

REF. DRAWING NO.	REV	TITLE
PID-1-FW-20690	5	FEEDWATER WET LAY-UP SYS.



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2


LR NOTES:
 1. THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION). VALVE GSC-V-126 IS ONLY OPENED WHEN CHEMISTRY IS ADJUSTING OXYGEN IN TANK 1-GSC-TK-85 PER ON1039.02 AND CS0911.06. ALL OTHERS COMPONENTS ON THIS DRAWING ARE IN THE TURBINE BUILDING WHICH HAS NO SAFETY RELATED COMPONENTS AND THEREFORE ARE NOT IN LR SCOPE.

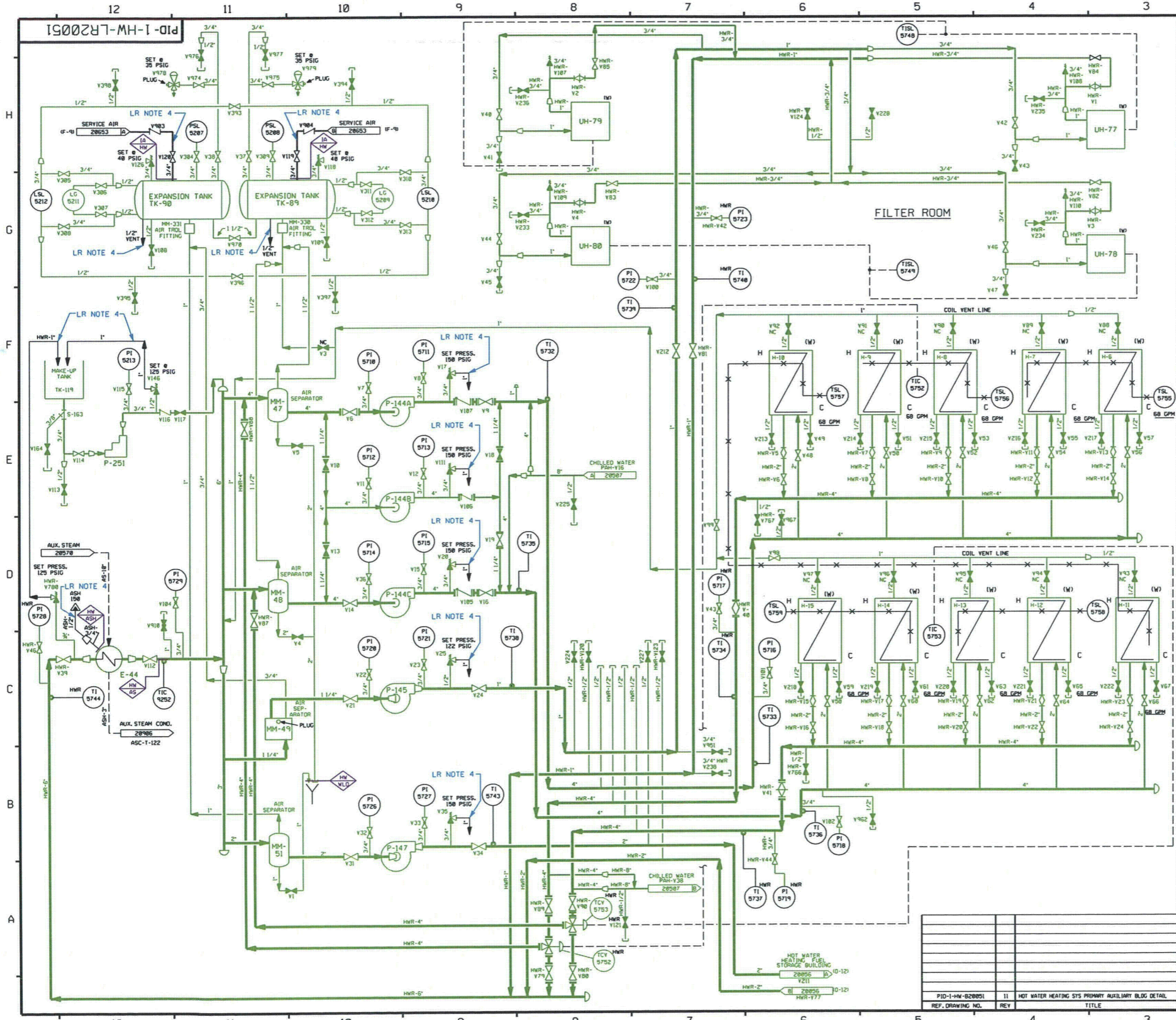
COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 IA - INSTRUMENT AIR SYSTEM
 GSC - GENERATOR STATOR COOLANT SYSTEM

NOTES:
 1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX GSC, UNLESS NOTED OTHERWISE.
 2. THE GSC SYSTEM IS A ONE (1) DRAWING SYSTEM, AN OVERVIEW DRAWING IS NOT REQUIRED.
 3. (D) DESIGNATES DRAIN CONNECTION, PLUGGED
 4. (V) DESIGNATES VENT CONNECTION, PLUGGED
 5. Δ - INDICATES REVISION LEVEL
 6. DELETED
 7. DELETED
 8. DELETED
 9. COMPONENTS WITHIN THE BOUNDARIES OF DOTTED LINES INCLUDING DM-SKD-166 MAY BE INSTALLED SEASONALLY.

REV	DATE	OSCN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION


GENERATOR STATOR COOLANT DETAIL
 LICENSE RENEWAL P&ID
 PID-1-GSC-LR20108



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. SEABROOK SYSTEMS 'HWS' AND 'HWR' ARE EVALUATED AS LR SYSTEM 'HW'.
 2. THE ONLY PORTION OF DESIGNATED UNIT HEATERS (UH-XX) AND INTAKE AIR HEATING COILS (H-XX) WITHIN THE LR BOUNDARY IS THE HOT WATER HEATING COIL/TUBING.
 3. ONLY THE SHELL AND CHANNEL HEAD OF STEAM/HOT WATER CONVERTER E-44 ARE WITHIN THE LR BOUNDARY.
 4. LINES ARE NOT LIQUID FILLED SO THESE COMPONENTS HAVE NO LICENSE RENEWAL (LR) INTENDED FUNCTION AND ARE NOT IN SCOPE.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

- ▲ PIPE ANCHOR
- ◇ (with XX) INDICATES SYSTEM BOUNDARY INTERFACE
 AS - AUXILIARY STEAM SYSTEM
 HW - HOT WATER HEATING SYSTEM
 ASH - AUXILIARY STEAM HEAT SYSTEM
 WLD - WASTE PROCESSING LIQUID DRAINS SYSTEM
 IA - INSTRUMENT AIR SYSTEM

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20048 THRU 20050 & 20052 THRU 20054.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX HWS, UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS HWS UNLESS NOTED OTHERWISE.
 4. HEATER ARRANGEMENT SHOWN ON DWG. I-MAH-20494.
 5. Δ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

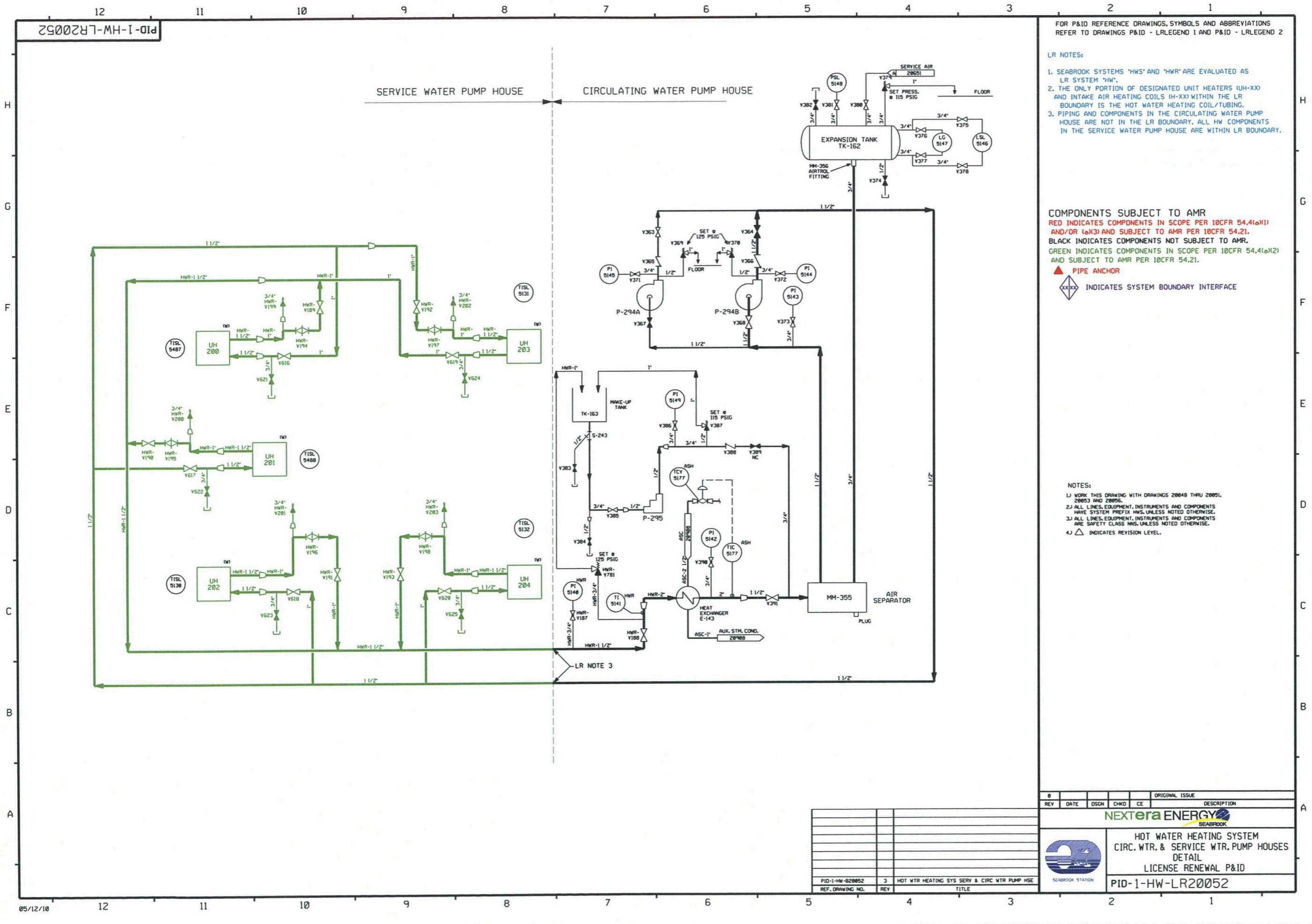
ORIGINAL ISSUE

NEXTERA ENERGY
SEABROOK

HOT WATER HEATING SYSTEM
 PRIMARY AUXILIARY BUILDING
 DETAIL
 LICENSE RENEWAL P&ID

PID-1-HW-LR20051

PID-1-HW-LR20052



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. SEABROOK SYSTEMS "HWS" AND "HWR" ARE EVALUATED AS LR SYSTEM "HW".
 2. THE ONLY PORTION OF DESIGNATED UNIT HEATERS (UH-XX) AND INTAKE AIR HEATING COILS (IH-XX) WITHIN THE LR BOUNDARY IS THE HOT WATER HEATING COIL/TUBING.
 3. PIPING AND COMPONENTS IN THE CIRCULATING WATER PUMP HOUSE ARE NOT IN THE LR BOUNDARY. ALL HW COMPONENTS IN THE SERVICE WATER PUMP HOUSE ARE WITHIN LR BOUNDARY.

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
 ▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
- 1) WORK THIS DRAWING WITH DRAWINGS 20048 THRU 20051, 20053 AND 20055.
 - 2) ALL LINES, EQUIPMENT, INSTRUMENTS AND COMPONENTS HAVE SYSTEM PREFIX MNS, UNLESS NOTED OTHERWISE.
 - 3) ALL LINES, EQUIPMENT, INSTRUMENTS AND COMPONENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
 - 4) △ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

ORIGINAL ISSUE

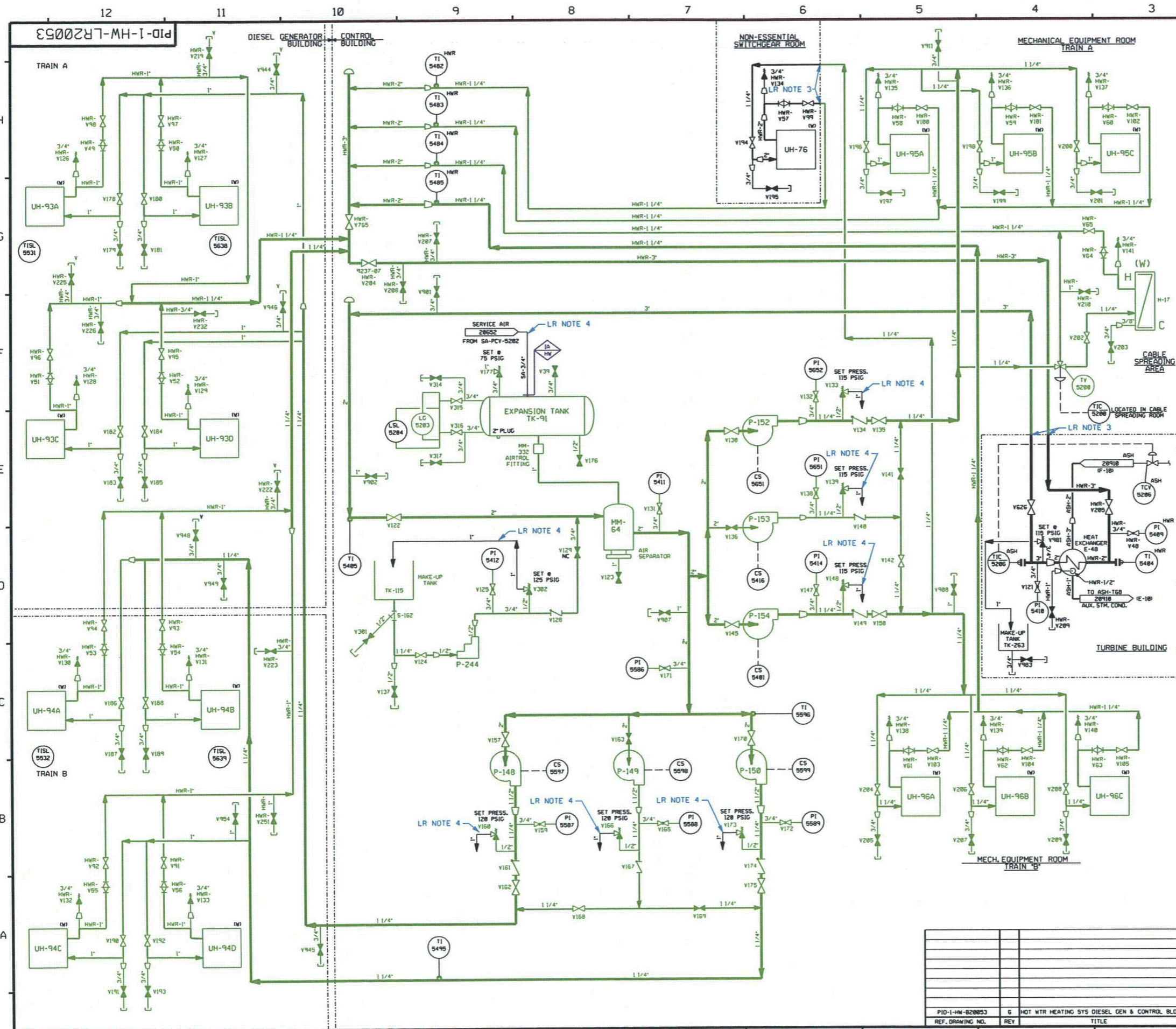
NEXTERA ENERGY
SEABROOK

HOT WATER HEATING SYSTEM
CIRC. WTR. & SERVICE WTR. PUMP HOUSES
DETAIL
LICENSE RENEWAL P&ID

PID-1-HW-LR20052

REF. DRAWING NO.	REV	TITLE
PID-1-HW-820052	3	HOT WTR HEATING SYS SERV & CIRC WTR PUMP HSE





FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
- SEABROOK SYSTEMS "HWS" AND "HWR" ARE EVALUATED AS LR SYSTEM "HW".
 - THE ONLY PORTION OF DESIGNATED UNIT HEATERS (UH-XX) AND INTAKE AIR HEATING COILS (IA-XX) WITHIN THE LR BOUNDARY IS THE HOT WATER HEATING COIL/TUBING.
 - PIPING AND COMPONENTS IN THE TURBINE BUILDING AND NON-ESSENTIAL SWITCHGEAR ROOM ARE NOT IN THE LR BOUNDARY. ALL HW (HWS & HWR) COMPONENTS IN THE DIESEL GENERATOR BUILDING AND CONTROL BUILDING SHOWN ON THIS DRAWING ARE WITHIN THE LICENSE RENEWAL BOUNDARY.
 - PIPES ARE NOT LIQUID FILLED SO THESE COMPONENTS HAVE NO LICENSE RENEWAL INTENDED FUNCTION AND ARE NOT IN SCOPE.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

- ▲ PIPE ANCHOR
- ◊ INDICATES SYSTEM BOUNDARY INTERFACE
- HW - HOT WATER HEATING SYSTEM
- IA - INSTRUMENT AIR SYSTEM

- NOTES:
- WORK THIS DRAWING WITH DRAWINGS 20048 THRU 20052 AND 20055.
 - ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX HWS, UNLESS NOTED OTHERWISE.
 - ALL EQUIPMENT IN THIS SYSTEM IS SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
 - △ INDICATES REVISION LEVEL.

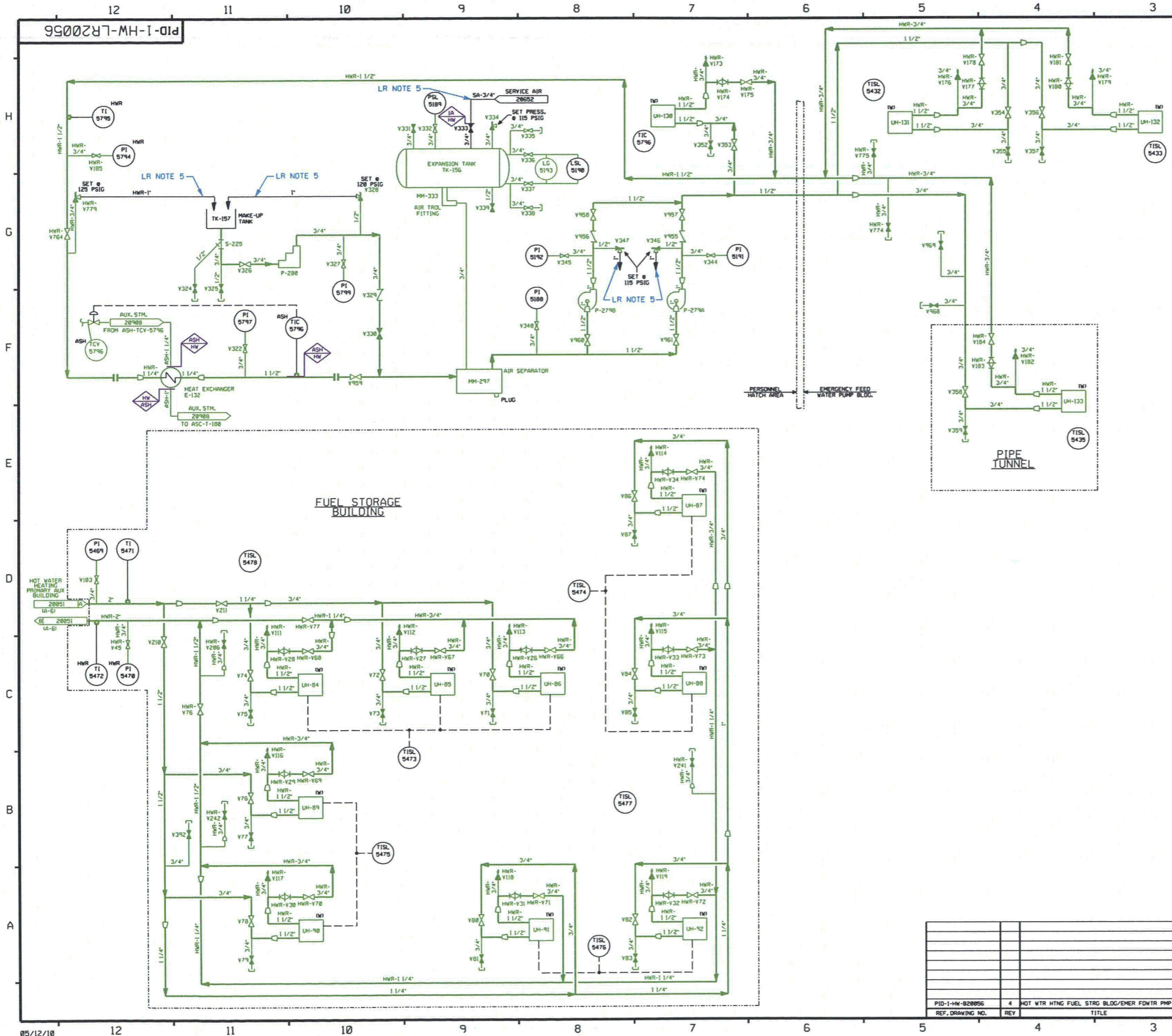
REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

HOT WATER HEATING SYSTEM
DIESEL GENERATOR & CONTROL BUILDING
DETAIL
LICENSE RENEWAL P&ID

PID-1-HW-LR20053

PID-1-HW-LR20056



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. SEABROOK SYSTEMS "HWS" AND "HWR" ARE EVALUATED AS LR SYSTEM "HW".
 2. THE ONLY PORTION OF DESIGNATED UNIT HEATERS (UH-XX) AND INTAKE AIR HEATING COILS (H-XX) WITHIN THE LR BOUNDARY IS THE HOT WATER HEATING COIL/TUBING.
 3. ONLY THE SHELL AND CHANNEL HEAD OF STEAM/HOT WATER CONVERTER E-132 ARE WITHIN THE LICENSE RENEWAL BOUNDARY.
 4. "HWS" AND/OR "HWR" COMPONENTS ARE EVALUATED UNDER THE "HW" SYSTEM.
 5. LINES ARE NOT LIQUID FILLED SO THEY HAVE NO LICENSE RENEWAL INTENDED FUNCTION AND ARE NOT IN SCOPE.

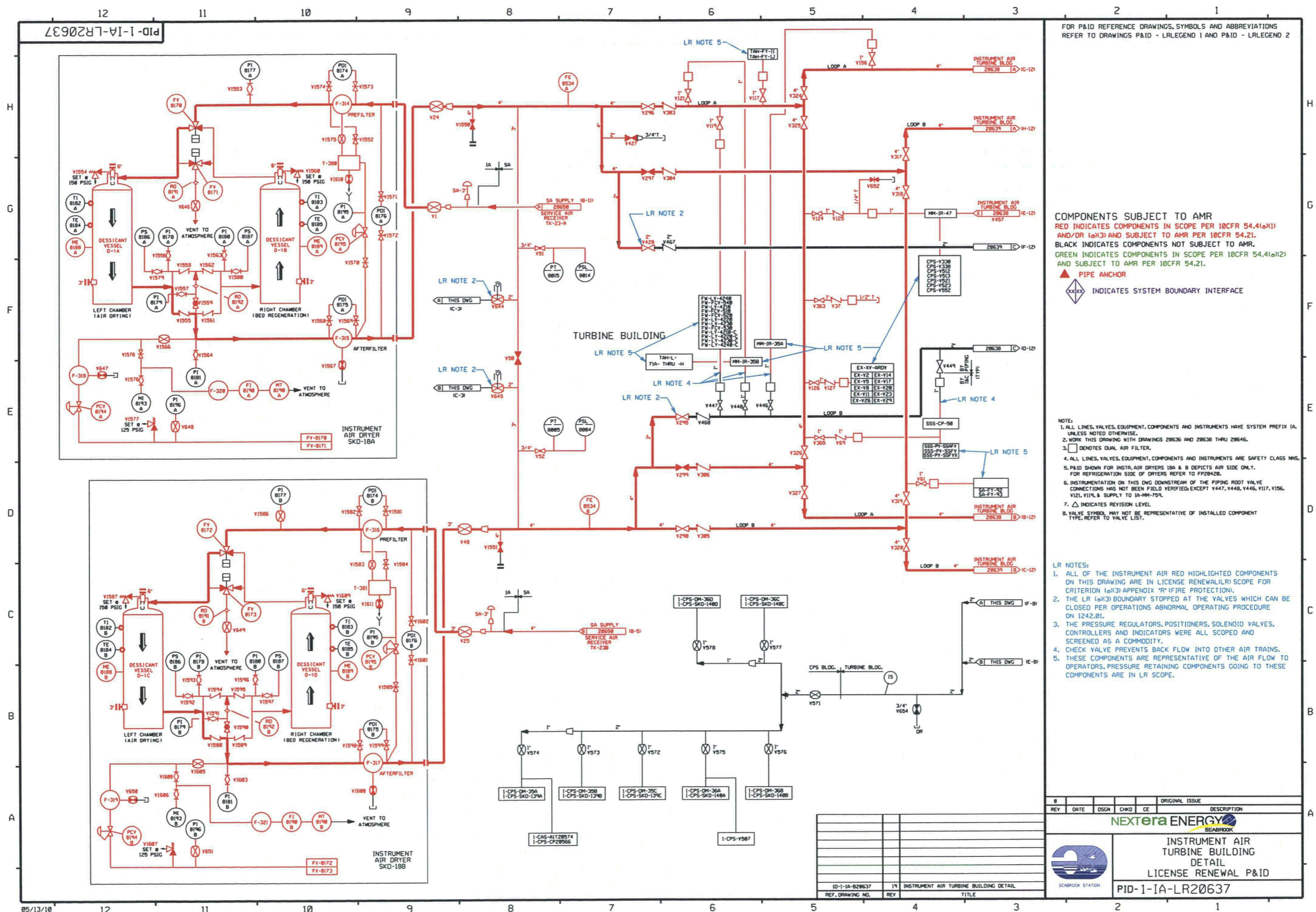
COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

- ▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 ASH - AUXILIARY STEAM HEATING SYSTEM
 HW - HOT WATER SUPPLY SYSTEM
 IA - INSTRUMENT AIR SYSTEM

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20048 THRU 20055.
 2. ALL LINES, EQUIPMENT, INSTRUMENTS AND COMPONENTS HAVE SYSTEM PREFIX HWS, UNLESS NOTED OTHERWISE.
 3. ALL EQUIPMENT IN THIS SYSTEM IS SAFETY CLASS MNS.
 4. △ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
0					ORIGINAL ISSUE
HOT WATER HEATING SYSTEM FUEL STORAGE BUILDING & EMERGENCY FEEDWATER PUMP HOUSE DETAIL LICENSE RENEWAL P&ID					
PID-1-HW-LR20056					

PID-1-IA-LR20637



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
 ▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

NOTE:
 1. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20636 AND 20638 THRU 20646.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS.
 5. P&ID SHOWN FOR INSTR. AIR DRYERS 18A & B DEPICTS AIR SIDE ONLY. FOR REFRIGERATION SIDE OF DRYERS REFER TO P&ID 20642B.
 6. INSTRUMENTATION ON THIS DWG DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN FIELD VERIFIED, EXCEPT V447, V448, V446, V117, V156, V121, V119, & SUPPLY TO IA-MM-759.
 7. △ INDICATES REVISION LEVEL.
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

LR NOTES:
 1. ALL OF THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX 'R' (FIRE PROTECTION).
 2. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 3. THE PRESSURE REGULATORS, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 4. CHECK VALVE PREVENTS BACK FLOW INTO OTHER AIR TRAINS. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.
 5. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

Nextera Energy
SEABROOK

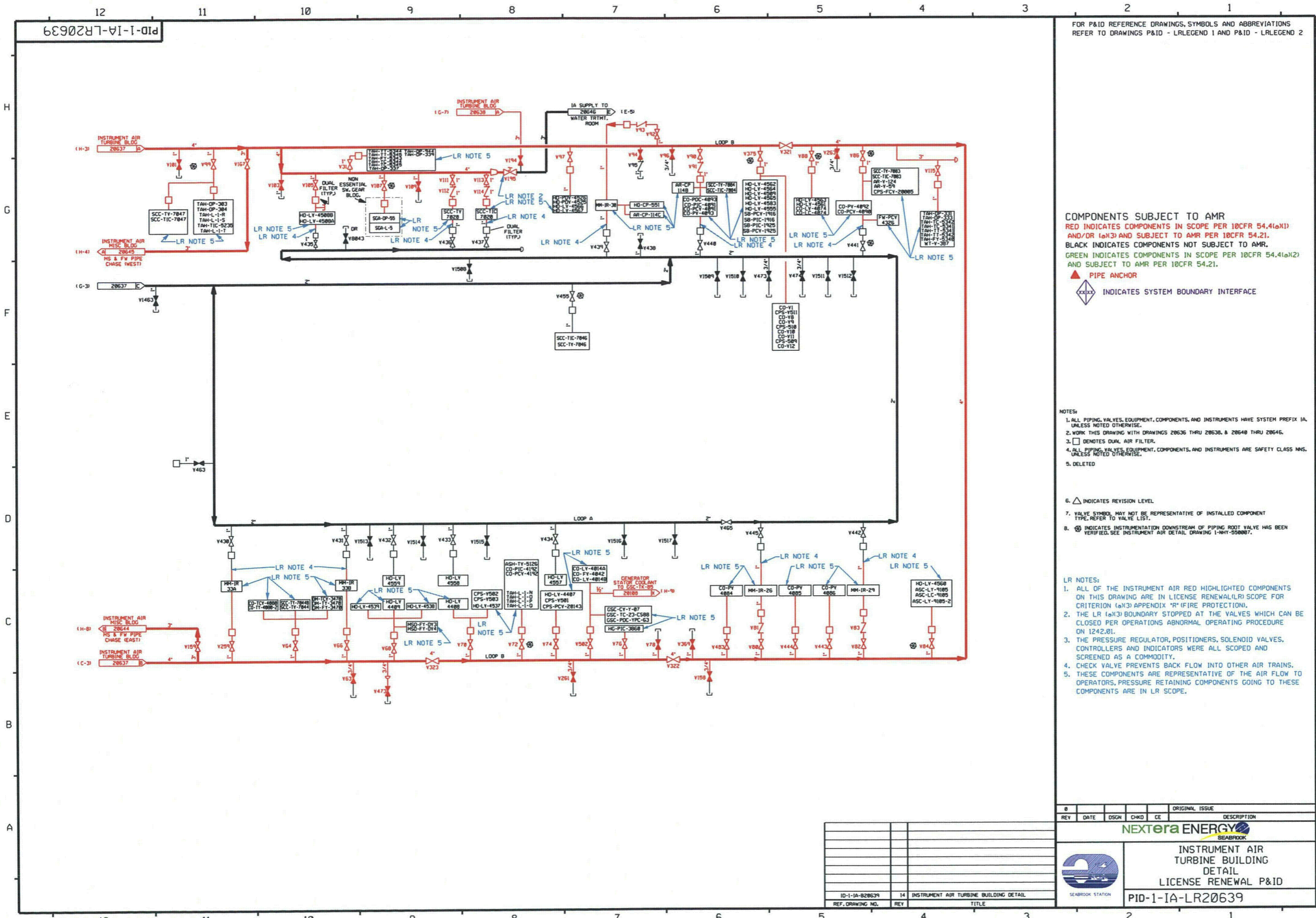
INSTRUMENT AIR TURBINE BUILDING DETAIL
LICENSE RENEWAL P&ID

PID-1-IA-LR20637

05/13/10	12	11	10	9	8	7	6	5	4	3	2	1
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1-CPS-DM-360 1-CPS-SKD-1480	1-CPS-DM-36C 1-CPS-SKD-148C	1-CAS-AIT20574 1-CPS-CP20566	1-CPS-DM-35A 1-CPS-SKD-139A	1-CPS-DM-35B 1-CPS-SKD-139B	1-CPS-DM-35C 1-CPS-SKD-139C	1-CPS-DM-36A 1-CPS-SKD-148A	1-CPS-DM-36B 1-CPS-SKD-148B	1-CPS-V507
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PID-1-IA-LR20639



COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:**
1. ALL PIPING, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX IA UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20638, & 20640 THRU 20646.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL PIPING, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS MNS UNLESS NOTED OTHERWISE.
 5. DELETED

6. △ INDICATES REVISION LEVEL
7. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.
8. ⊗ INDICATES INSTRUMENTATION DOWNSTREAM OF PIPING ROOT VALVE HAS BEEN VERIFIED, SEE INSTRUMENT AIR DETAIL DRAWING 1-NM-508807.

- LR NOTES:**
1. ALL OF THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL (LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION).
 2. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 3. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 4. CHECK VALVE PREVENTS BACK FLOW INTO OTHER AIR TRAINS.
 5. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
0					ORIGINAL ISSUE

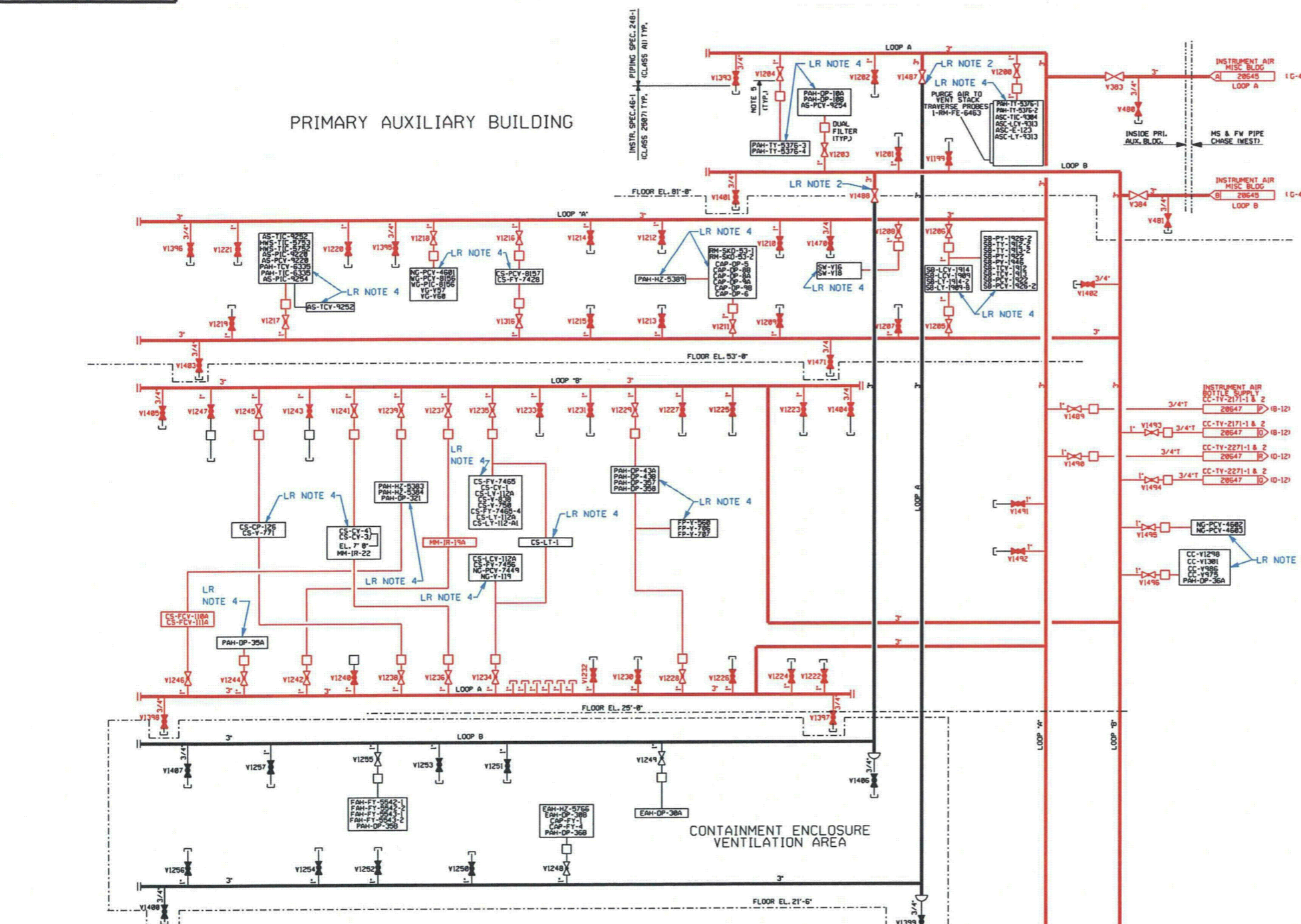
NEXTERA ENERGY
SEABROOK

INSTRUMENT AIR TURBINE BUILDING DETAIL
 LICENSE RENEWAL P&ID
 PID-1-IA-LR20639

REF. DRAWING NO.	REV	TITLE
ID-1-IA-B20639	14	INSTRUMENT AIR TURBINE BUILDING DETAIL

PID-1-IA-LR20640

PRIMARY AUXILIARY BUILDING



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20639 & 20641 THRU 20646.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS MNS UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS DNG DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
 6. △ INDICATES REVISION LEVEL
 7. DELETED
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

- LR NOTES:
1. ALL OF THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION).
 2. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 3. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 4. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

INSTRUMENT AIR PRIMARY AUX. BUILDING DETAIL
 LICENSE RENEWAL P&ID
 PID-1-IA-LR20640

PID-1-IA-LR20641

PRIMARY AUXILIARY BUILDING

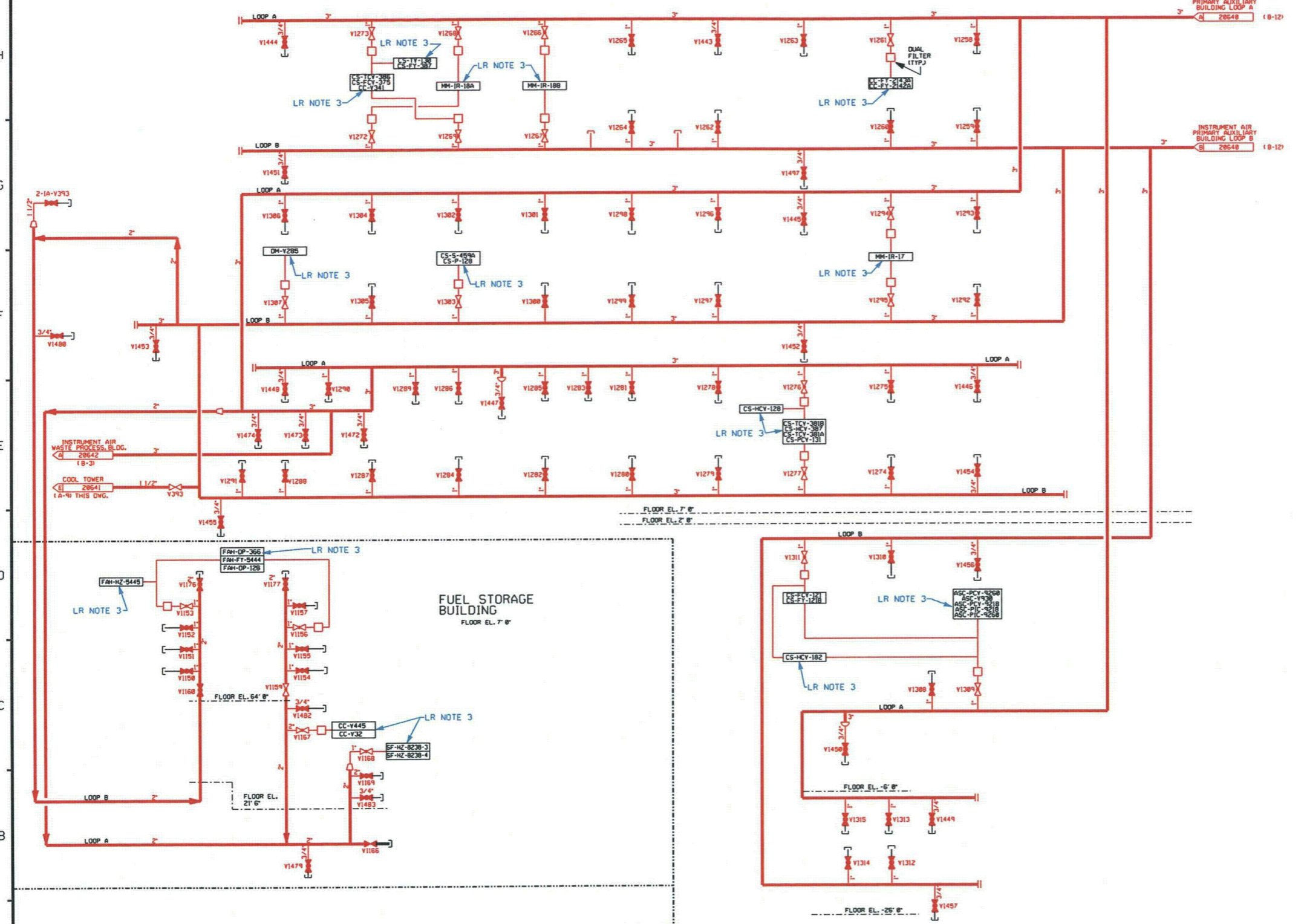
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◊ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTE:
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20640, & 20642 THRU 20646.
 2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N, UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS DNG. DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
 6. △ INDICATES REVISION LEVEL.
 7. DELETED
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

- LR NOTES:
1. ALL OF THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL (LR) SCOPE FOR CRITERION (a)(3) APPENDIX 'R' (FIRE PROTECTION).
 2. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 3. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.



REV	DATE	DSGN	CHKD	CE	DESCRIPTION

NEXTERA ENERGY
 SEABROOK

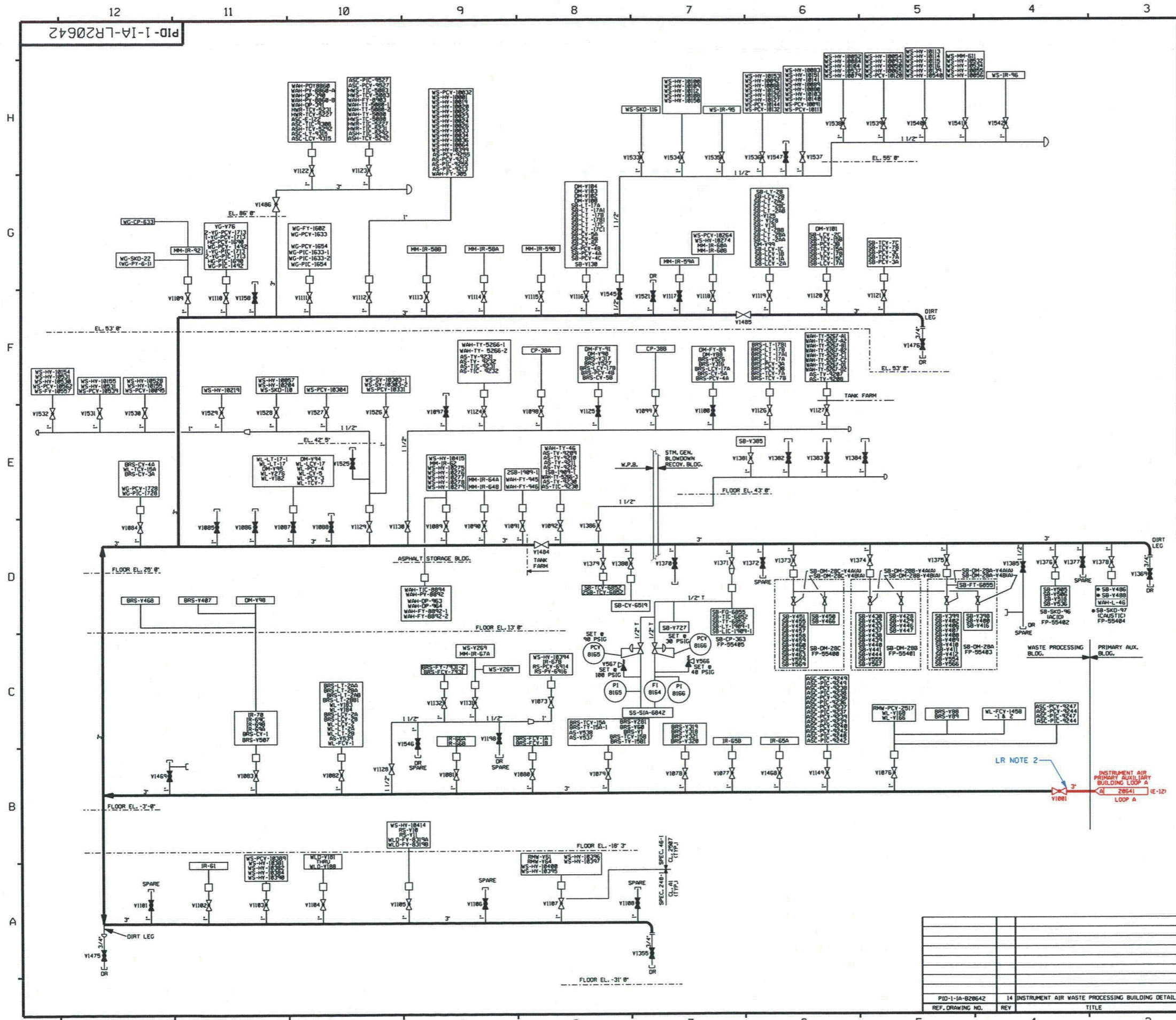
INSTRUMENT AIR
 PRIMARY AUX. BUILDING
 COOLING TOWER & FUEL STORAGE
 DETAIL
 LICENSE RENEWAL P&ID

PID-1-IA-LR20641

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

05/08/10

PID-1-IA-LR20642



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
- ALL OF THE INSTRUMENT AIR RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION).
 - THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆◆◆◆ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
- WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20641 & 20643 THRU 20646.
 - ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 - DENOTES DUAL AIR FILTER.
 - ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTATION ARE SAFETY CLASS MNS UNLESS NOTED OTHERWISE.
 - INSTRUMENTATION ON THIS DWG. DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN FIELD VERIFIED.
 - △ INDICATES REVISION LEVEL.
 - VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
0					ORIGINAL ISSUE

NEXTERA ENERGY
SEABROOK

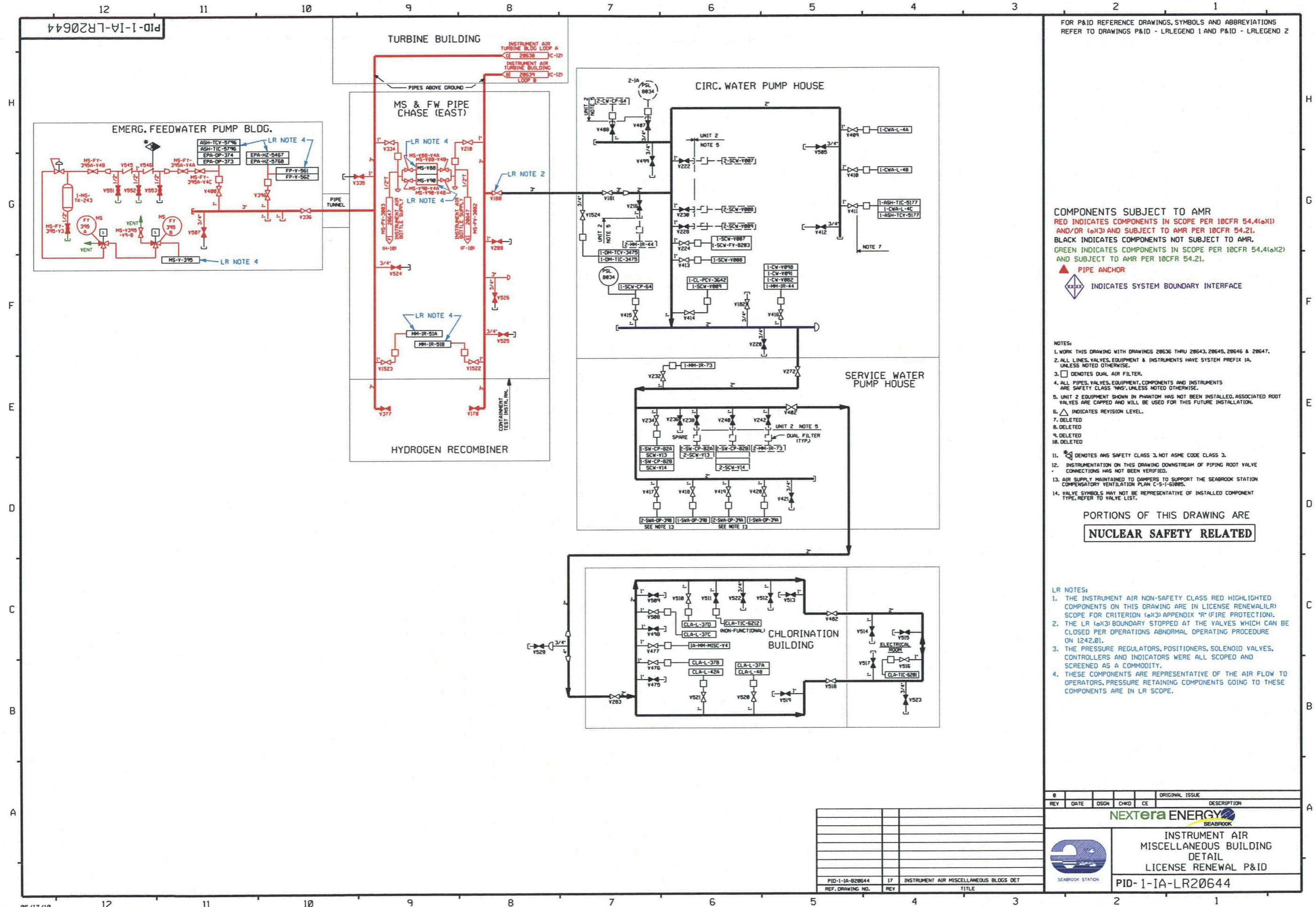
INSTRUMENT AIR WASTE PROCESSING BUILDING DETAIL
 LICENSE RENEWAL P&ID
 PID-1-IA-LR20642

SCABROOK STATION

PID-1-IA-B20642	14	INSTRUMENT AIR WASTE PROCESSING BUILDING DETAIL
REF. DRAWING NO.	REV	TITLE

PID-1-IA-LR20644

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2



COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
▲ PIPE ANCHOR
◊ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:**
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20643, 20645, 20646 & 20647.
 2. ALL LINES, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS "MS", UNLESS NOTED OTHERWISE.
 5. UNIT 2 EQUIPMENT SHOWN IN PHANTOM HAS NOT BEEN INSTALLED. ASSOCIATED ROOT VALVES ARE CAPPED AND WILL BE USED FOR THIS FUTURE INSTALLATION.
 6. ▲ INDICATES REVISION LEVEL.
 7. DELETED
 8. DELETED
 9. DELETED
 10. DELETED
 11. ⚡ DENOTES AMS SAFETY CLASS 3, NOT ASME CODE CLASS 3.
 12. INSTRUMENTATION ON THIS DRAWING DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
 13. AIR SUPPLY MAINTAINED TO DAMPERS TO SUPPORT THE SEABROOK STATION COMPENSATORY VENTILATION PLAN C-5-1-61005.
 14. VALVE SYMBOLS MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

- LR NOTES:**
1. THE INSTRUMENT AIR NON-SAFETY CLASS RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION).
 2. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 3. THE PRESSURE REGULATORS, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 4. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

ORIGINAL ISSUE

Nextera ENERGY
SEABROOK

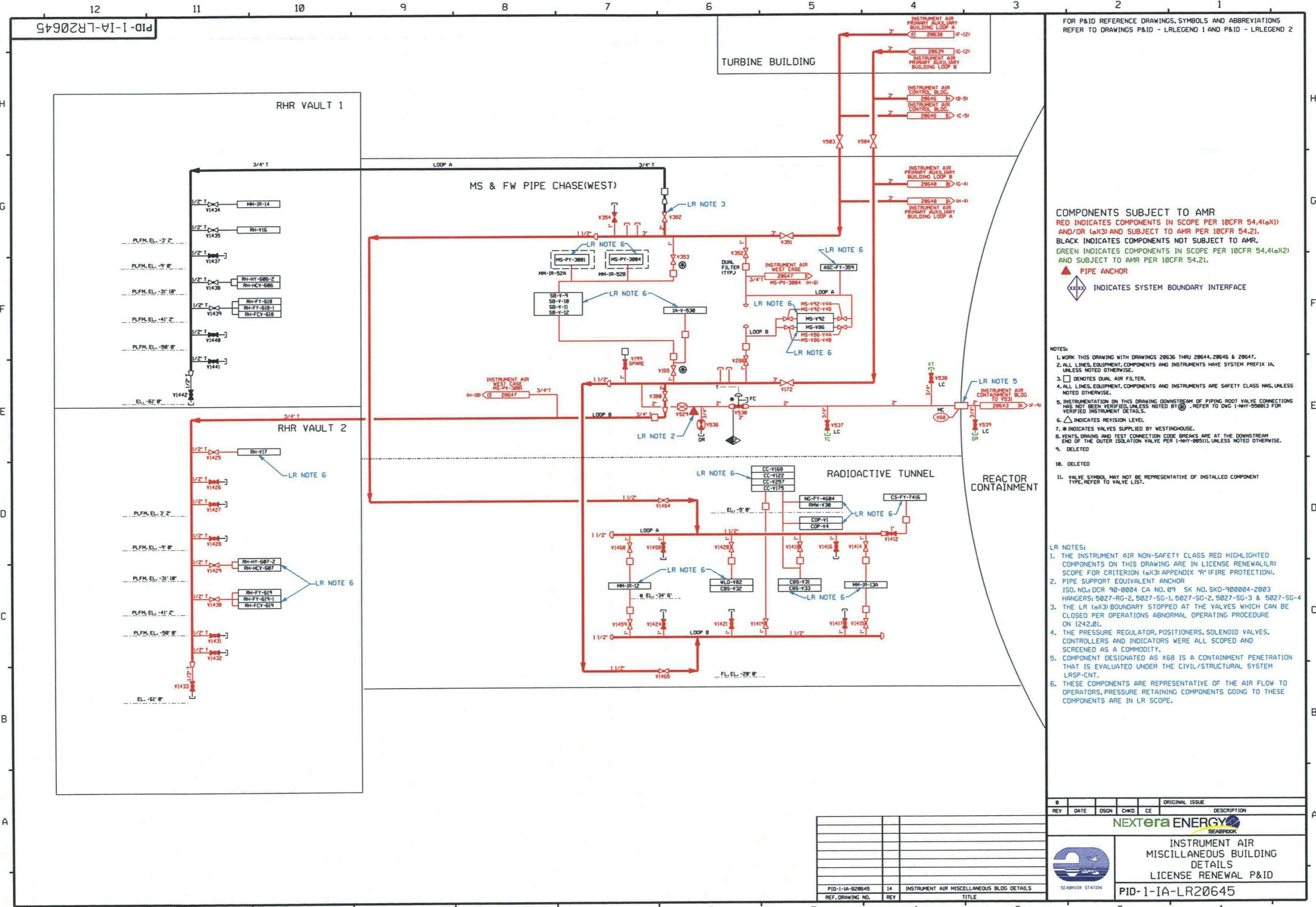
INSTRUMENT AIR MISCELLANEOUS BUILDING DETAIL LICENSE RENEWAL P&ID

PID-1-IA-LR20644

PID-1-IA-B20644	17	INSTRUMENT AIR MISCELLANEOUS BLDGS DET
REF. DRAWING NO.	REV	TITLE



PID-1-IA-LR20645



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
▲ PIPE ANCHOR
◇ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:**
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20644, 20645 & 20647.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS DRAWING DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED, UNLESS NOTED BY . REFER TO DWG I-NHT-550013 FOR VERIFIED INSTRUMENT DETAILS.
 6. ▲ INDICATES REVISION LEVEL.
 7. * INDICATES VALVES SUPPLIED BY WESTINGHOUSE.
 8. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER I-NHT-508111, UNLESS NOTED OTHERWISE.
 9. DELETED
 10. DELETED
 11. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

- LR NOTES:**
1. THE INSTRUMENT AIR NON-SAFETY CLASS RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL LR SCOPE FOR CRITERION (a)(3) APPENDIX 'R' (FIRE PROTECTION).
 2. PIPE SUPPORT EQUIVALENT ANCHOR
 150, NO. 1, DCR 90-0004 CA NO. 09 SK NO. SKD-900004-2003
 HANGERS: 5027-RG-2, 5027-SG-1, 5027-SG-2, 5027-SG-3 & 5027-SG-4
 3. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 4. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 5. COMPONENT DESIGNATED AS X68 IS A CONTAINMENT PENETRATION THAT IS EVALUATED UNDER THE CIVIL/STRUCTURAL SYSTEM LRSP-CNT.
 6. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

ORIGINAL ISSUE

Nextera ENERGY
SEABROOK

INSTRUMENT AIR MISCILLANEOUS BUILDING DETAILS LICENSE RENEWAL P&ID

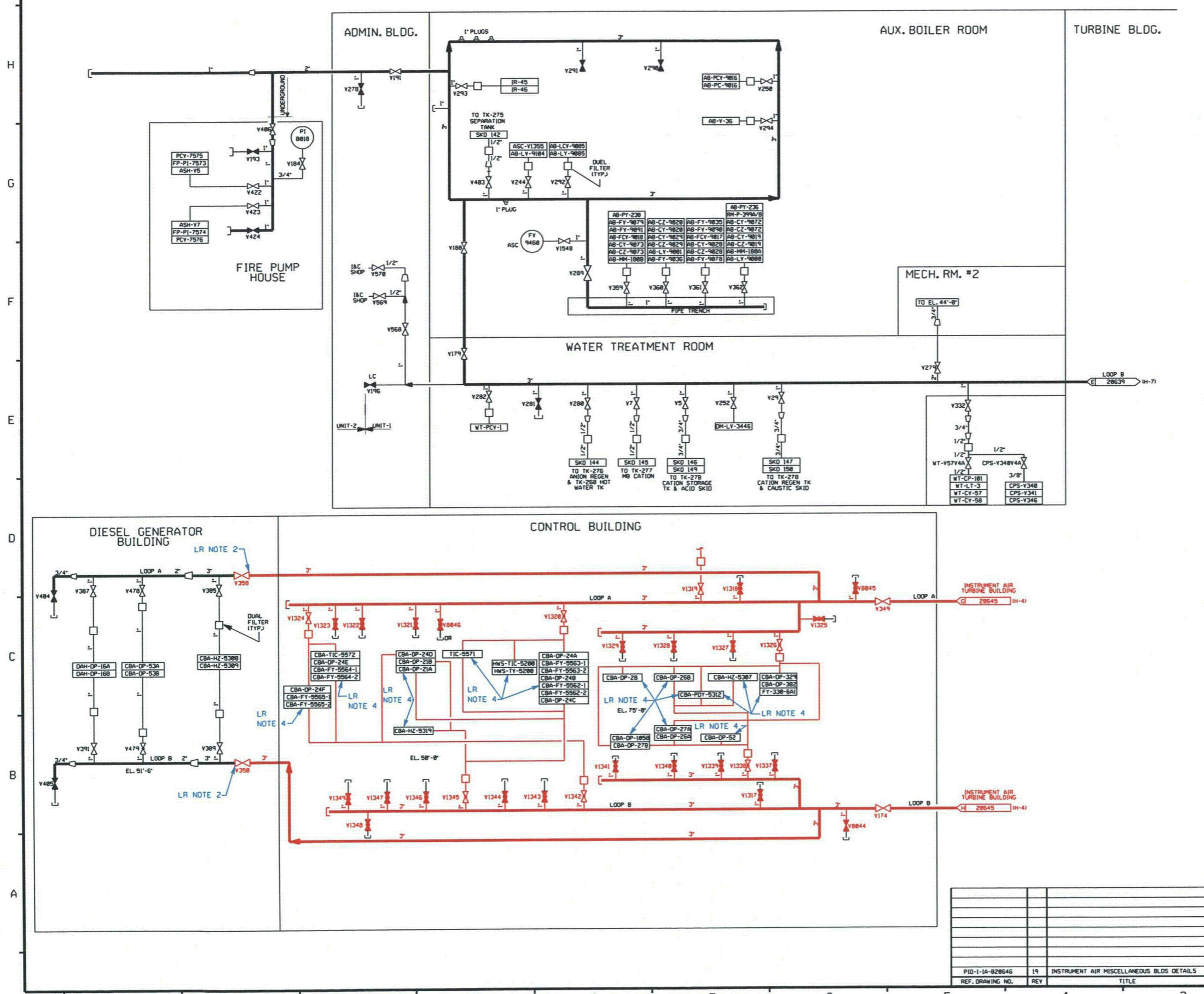
SEABROOK STATION

PID-1-IA-LR20645

PID-1-IA-20645	14	INSTRUMENT AIR MISCILLANEOUS BLDG DETAILS
REF. DRAWING NO.	REV	TITLE

PID-1-IA-LR20646

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2



COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
 ▲ PIPE ANCHOR
 ◊ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:**
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20645.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. □ DENOTES DUAL AIR FILTER.
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS END DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTION HAS NOT BEEN FIELD VERIFIED.
 6. ▲ INDICATES REVISION LEVEL.
 7. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

- LR NOTES:**
1. THE INSTRUMENT AIR NON-SAFETY CLASS RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(LR) SCOPE FOR CRITERION (a)(3) APPENDIX "R" (FIRE PROTECTION).
 2. THE LR (a)(3) BOUNDARY STOPPED AT THE VALVES WHICH CAN BE CLOSED PER OPERATIONS ABNORMAL OPERATING PROCEDURE ON 1242.01.
 3. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 4. THESE COMPONENTS ARE REPRESENTATIVE OF THE AIR FLOW TO OPERATORS, PRESSURE RETAINING COMPONENTS GOING TO THESE COMPONENTS ARE IN LR SCOPE.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

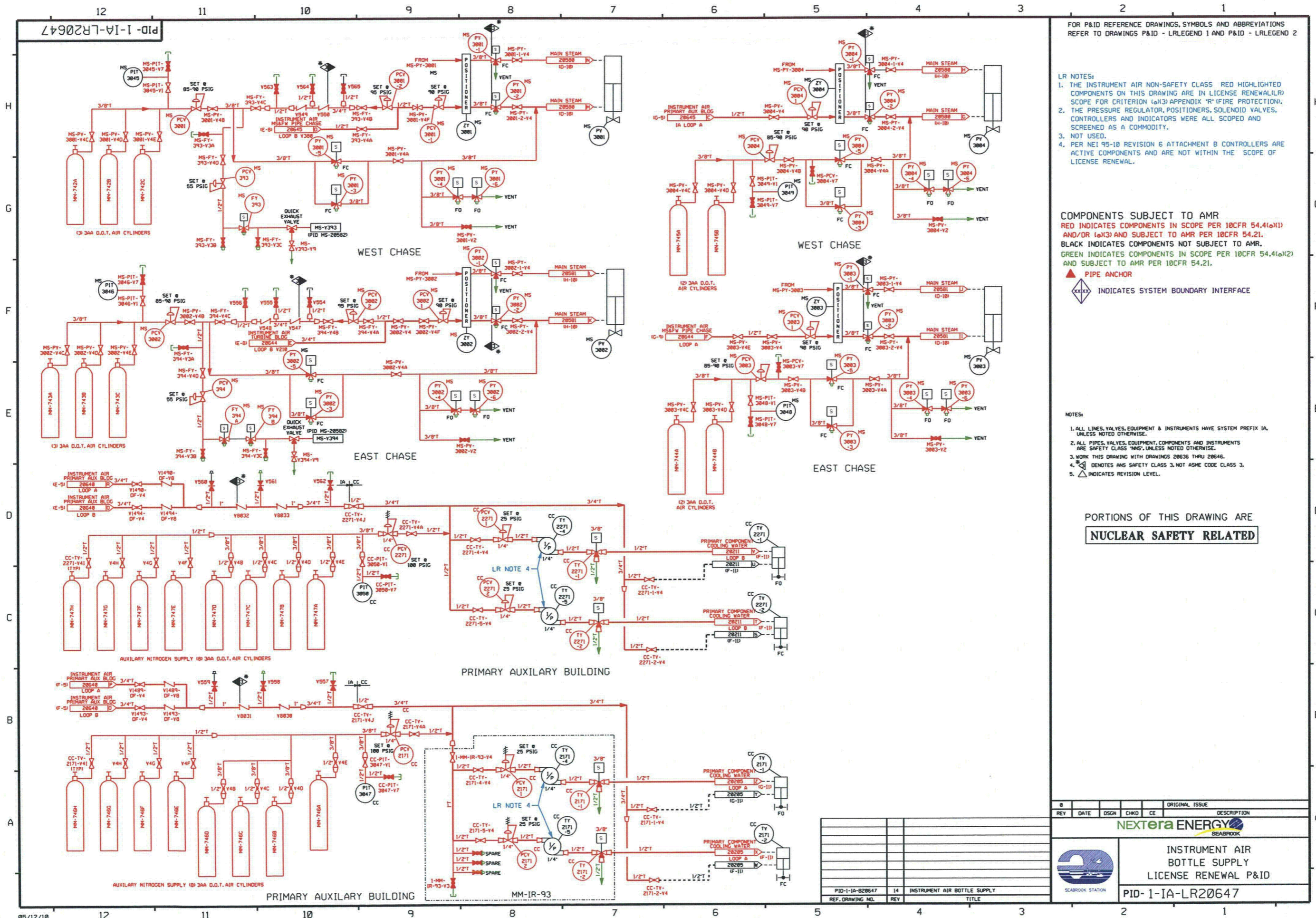
ORIGINAL ISSUE

Nextera Energy
SEABROOK

INSTRUMENT AIR MISCELLANEOUS BUILDINGS DETAILS
 LICENSE RENEWAL P&ID

PID-1-IA-LR20646

PID-1-IA-020646	19	INSTRUMENT AIR MISCELLANEOUS BLOS DETAILS
REF. DRAWING NO.	REV	TITLE



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
1. THE INSTRUMENT AIR NON-SAFETY CLASS RED HIGHLIGHTED COMPONENTS ON THIS DRAWING ARE IN LICENSE RENEWAL(R) SCOPE FOR CRITERION (a)(3) APPENDIX 'R' IF FIRE PROTECTION.
 2. THE PRESSURE REGULATOR, POSITIONERS, SOLENOID VALVES, CONTROLLERS AND INDICATORS WERE ALL SCOPED AND SCREENED AS A COMMODITY.
 3. NOT USED.
 4. PER NEI 95-10 REVISION 6 ATTACHMENT B CONTROLLERS ARE ACTIVE COMPONENTS AND ARE NOT WITHIN THE SCOPE OF LICENSE RENEWAL.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆◆◆◆ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
1. ALL LINES, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS 'MS', UNLESS NOTED OTHERWISE.
 3. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20646.
 4. * DENOTES MS SAFETY CLASS 3, NOT ASME CODE CLASS 3.
 5. △ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

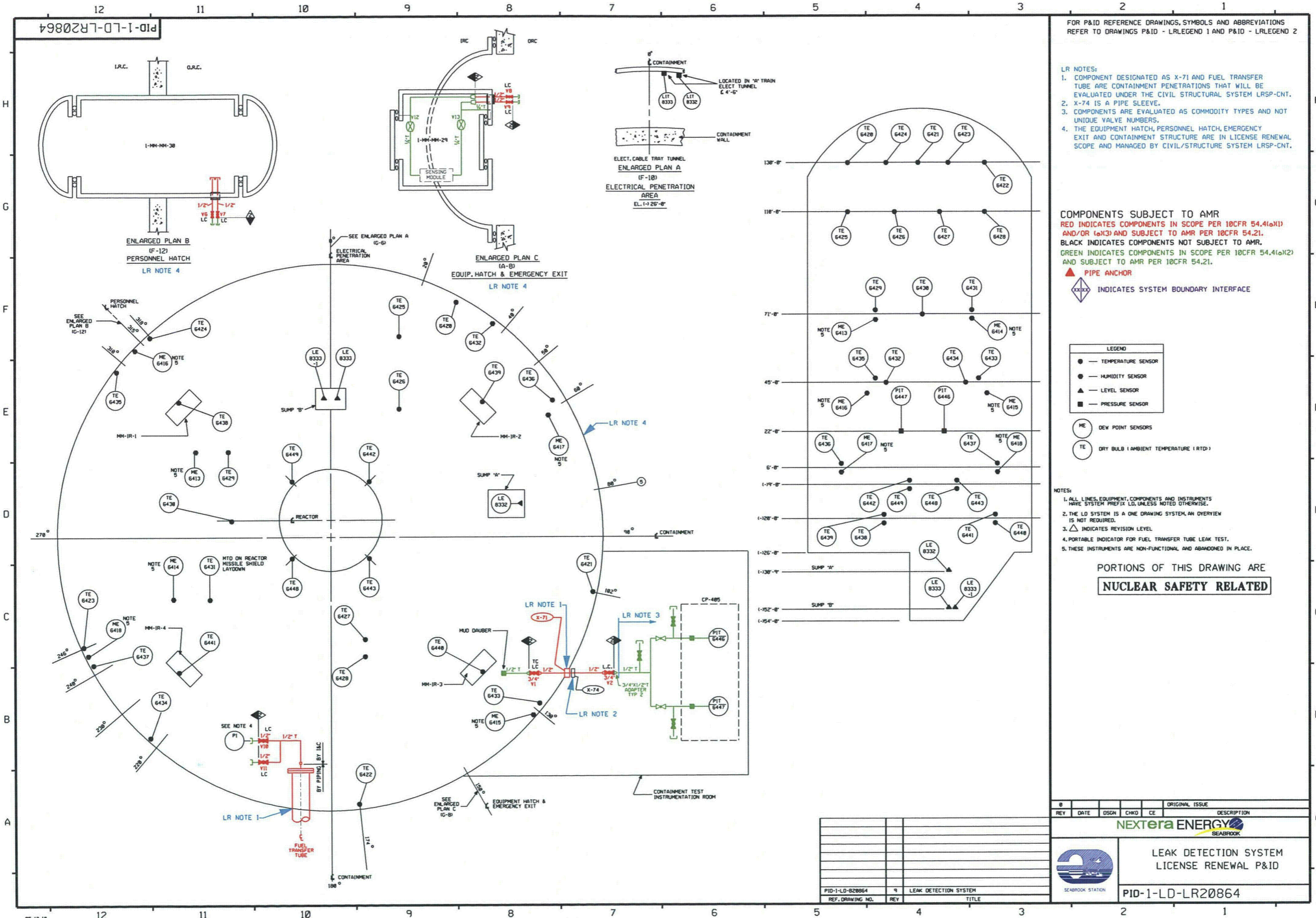
INSTRUMENT AIR BOTTLE SUPPLY LICENSE RENEWAL P&ID

PID-1-IA-LR20647

PID-1-IA-20647	14	INSTRUMENT AIR BOTTLE SUPPLY
REF. DRAWING NO.	REV	TITLE

SEABROOK STATION

1980277-07-01d



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

- LR NOTES:
- COMPONENT DESIGNATED AS X-71 AND FUEL TRANSFER TUBE ARE CONTAINMENT PENETRATIONS THAT WILL BE EVALUATED UNDER THE CIVIL STRUCTURAL SYSTEM LRSP-CNT.
 - X-74 IS A PIPE SLEEVE.
 - COMPONENTS ARE EVALUATED AS COMMODITY TYPES AND NOT UNIQUE VALVE NUMBERS.
 - THE EQUIPMENT HATCH, PERSONNEL HATCH, EMERGENCY EXIT AND CONTAINMENT STRUCTURE ARE IN LICENSE RENEWAL SCOPE AND MANAGED BY CIVIL/STRUCTURE SYSTEM LRSP-CNT.

COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE

LEGEND

●	TEMPERATURE SENSOR
●	HUMIDITY SENSOR
▲	LEVEL SENSOR
■	PRESSURE SENSOR

- ME DEW POINT SENSORS
- TE DRY BULB AMBIENT TEMPERATURE (RTD)

- NOTES:
- ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX LD, UNLESS NOTED OTHERWISE.
 - THE LD SYSTEM IS A ONE DRAWING SYSTEM, AN OVERVIEW IS NOT REQUIRED.
 - △ INDICATES REVISION LEVEL
 - PORTABLE INDICATOR FOR FUEL TRANSFER TUBE LEAK TEST.
 - THESE INSTRUMENTS ARE NON-FUNCTIONAL AND ABANDONED IN PLACE.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSCH	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

LEAK DETECTION SYSTEM
LICENSE RENEWAL P&ID

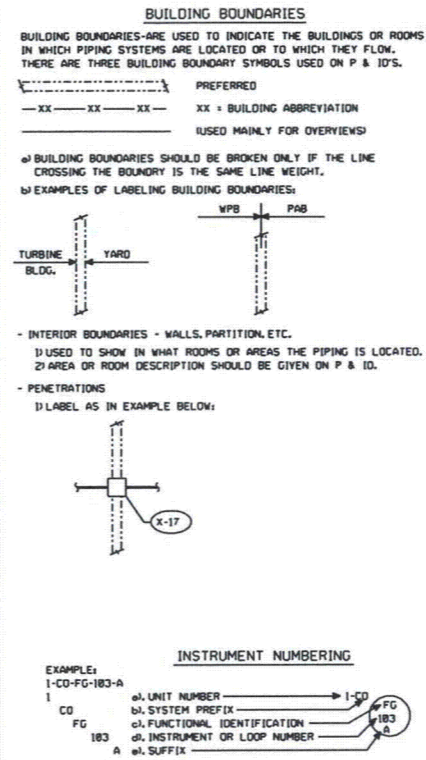
SEABROOK STATION
PID-1-LD-LR20864

REF. DRAWING NO.	REV	TITLE
PID-1-LD-B20864	9	LEAK DETECTION SYSTEM

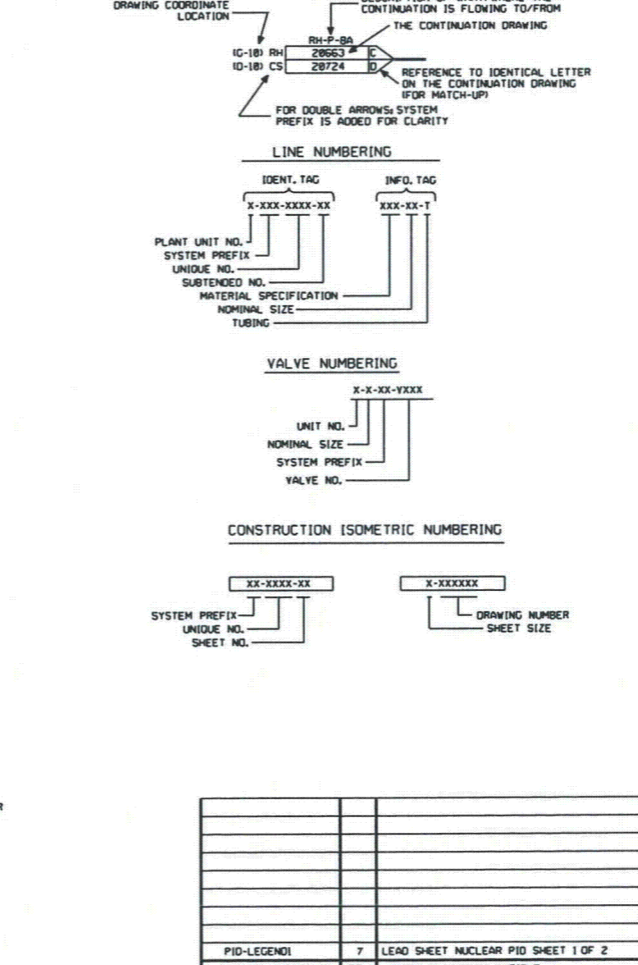
Table with columns: SYSTEM, SYSTEM PREFIX, ALLOTTED LINE NO'S, P & ID DWG. NUMBERS (OVERVIEW, DETAILS). Lists various systems like Administration Services, Auxiliary Steam, etc.

Table with columns: SYSTEM, SYSTEM PREFIX, ALLOTTED LINE NO'S, P & ID DWG. NUMBERS (OVERVIEW, DETAILS). Lists various systems like Dewatering, Electrical Distribution, Fire Protection, etc.

Table with columns: SYSTEM, SYSTEM PREFIX, ALLOTTED LINE NO'S, P & ID DWG. NUMBERS (OVERVIEW, DETAILS). Lists various systems like Reactor Coolant, Residual Heat Removal, Sanitary Piping, etc.



Large table of Abbreviations. Columns include: A, AIR, ACCUM, ACT, etc. and their corresponding descriptions.



COMPONENTS SUBJECT TO AMR. RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.41(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21. BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR. GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.41(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

GENERAL NOTES. 1. UNLESS AN ANS SAFETY CLASS BREAK IS INDICATED, THE ASME SECTION III CODE CLASS BOUNDARY TERMINATES AT THE INSTRUMENT MANIFOLD IZ OR 5R OR ITS ASSOCIATED SEALS WHICH IS EXCLUDED FROM THE CODE BY NIA.1136 PARAGRAPH 'C'.

Table listing systems and their prefixes/line numbers. Columns: SYSTEM, SYSTEM PREFIX, ALLOTTED LINE NO'S. Lists systems like Containment Air Handling, Fuel Storage Bldg, etc.

Project information block including: NEXTera ENERGY SEABROOK, LEAD SHEET NUCLEAR PIPING & INSTRUMENT DIAGRAMS SHEET 1 OF 2, LICENSE RENEWAL P&ID, PID - LRLEGEND1, and a revision table.

PID-LEGEND2

MISCELLANEOUS PIPING AND EQUIPMENT SYMBOLS

SYMBOL	DESCRIPTION
[Symbol]	WYE STRAINER
[Symbol]	FIGURE '8' FLANGE (SPECTACLE FLANGE)
[Symbol]	PERMANENT IN-LINE STRAINER
[Symbol]	TEMPORARY STRAINER, REMOVABLE SCREEN
[Symbol]	BASKET STRAINER DUPLEX
[Symbol]	BASKET STRAINER SINGLE
[Symbol]	CONE TYPE REMOVABLE STRAINER
[Symbol]	REMOVABLE SPOOL
[Symbol]	BLIND FLANGE
[Symbol]	RESTRICTING ORIFICE
[Symbol]	FLOW ORIFICE
[Symbol]	PRESSURE REDUCER
[Symbol]	PULSATION DAMPER
[Symbol]	REDUCER, CONCENTRIC
[Symbol]	REDUCER, ECCENTRIC
[Symbol]	DRESSER COUPLING
[Symbol]	EXPANSION JOINT
[Symbol]	FLEX HOSE
[Symbol]	ELECTRIC EMERSION HEATER
[Symbol]	PLUG
[Symbol]	OPEN FUNNEL DRAIN
[Symbol]	LOW POINT DRAIN
[Symbol]	HIGH POINT VENT
[Symbol]	VENT TO ATMOSPHERE
[Symbol]	POST INDICATOR
[Symbol]	FILTER
[Symbol]	DRIER FILTER
[Symbol]	TRAP X=0 DRAIN X=1 AIR X=2 LIQUID X=3 STEAM
[Symbol]	RESIN TRAP
[Symbol]	JOHNSON SCREEN
[Symbol]	SPRAY NOZZLES
[Symbol]	SPARGER (INSIDE VESSELS)
[Symbol]	CAP-SMALL BORE (SOCKET WELDED OR THREADED)
[Symbol]	CAP-LARGE BORE (BUTT WELDED)
[Symbol]	QUICK DISCONNECT COUPLING
[Symbol]	HOSE CONNECTOR
[Symbol]	FLAME ARRESTER
[Symbol]	SIGHT FLOW GLASS
[Symbol]	SILENCER
[Symbol]	VALVE STEM LEAK-OFF
[Symbol]	ATOMIZER
[Symbol]	FIRE HOSE REEL ASSEMBLY
[Symbol]	ANGLE VALVE
[Symbol]	HOSE & REEL ASSEMBLY NOZZLE
[Symbol]	FIRE HYDRANT WITH HOSE HOUSE
[Symbol]	FIRE HYDRANT
[Symbol]	SPRINKLER HEAD-UPRIGHT TYPE
[Symbol]	SPRINKLER HEAD-PENDANT TYPE

VALVE TYPES
NOTE: ALL VALVES SHOWN SOLID REPRESENTS CLOSED POSITION.
EXAMPLE: GATE VALVE (CLOSED)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	GATE VALVE	[Symbol]	VACUUM BREAKER
[Symbol]	GLOBE VALVE	[Symbol]	VACUUM RELIEF VALVE
[Symbol]	BALL VALVE	[Symbol]	AUTO AIR RELEASE VALVE
[Symbol]	PLUG VALVE	[Symbol]	SAFETY OR RELIEF VALVE
[Symbol]	CHECK VALVE	[Symbol]	ANGLE VALVE
[Symbol]	STOP CHECK VALVE	[Symbol]	THREE WAY VALVE
[Symbol]	PACKLESS METAL DIAPHRAGM VALVE	[Symbol]	FOUR WAY VALVE
[Symbol]	SALMERS WEIR VALVE (OPEN)	[Symbol]	DELUGE VALVE OR PREACTION DRYPIPE VALVE
[Symbol]	NEEDLE VALVE	[Symbol]	SPRINKLER VALVE
[Symbol]	QUICK TEST VALVE	[Symbol]	FLOW ALARM
[Symbol]	QUICK OPENING VALVE (OPEN)	[Symbol]	FOOT VALVE
[Symbol]	BUTTERFLY VALVE (OPEN)	[Symbol]	ANTI-SIPHON VALVE
[Symbol]	BUTTERFLY VALVE (CLOSED) NOTE 1	[Symbol]	DISPERSAL VALVE
[Symbol]	HYDRAULIC ISOLATOR	[Symbol]	

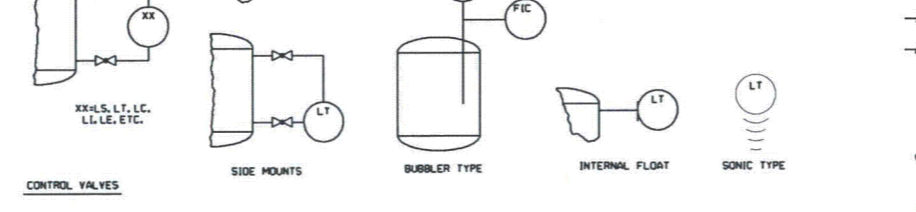
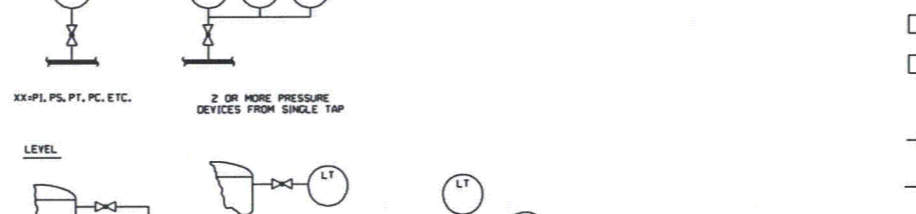
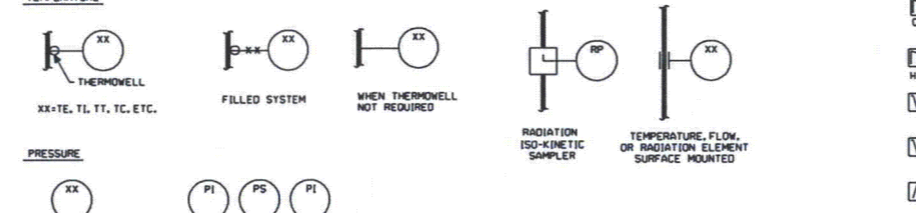
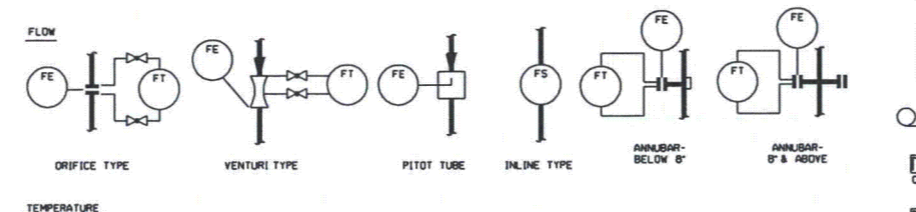
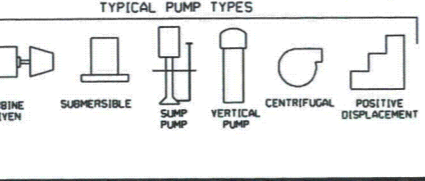
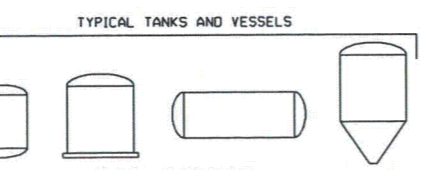
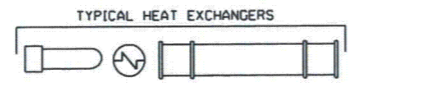
VALVE OPERATORS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	ELECTRO-HYDRAULIC	[Symbol]	REACH ROD
[Symbol]	DIAPHRAGM	[Symbol]	SPEED CONTROL
[Symbol]	MOTOR	[Symbol]	HANDWHEEL
[Symbol]	PISTON	[Symbol]	VALVE HANDWHEEL W/BOX AT GRADE
[Symbol]		[Symbol]	CHAIN OPERATOR

X = G GEAR
S = SOLENOID
H = HYDRAULIC

LINE CODES

LINE	DESCRIPTION
[Symbol]	PRIMARY DISTRIBUTION HEADERS & PRINCIPAL FLOW PATH PROCESS PIPING
[Symbol]	SECONDARY HEADERS, ALTERNATE FLOW PATHS, BYPASS PIPING & SERVICE PIPING (e.g. COOLING WATER)
[Symbol]	VENTS AND DRAINS, SAMPLE LINES, INSTRUMENT LINES, VARIOUS SIGNAL LINES, COMPONENT OUTLINES AND LETTERING.
[Symbol]	REVISION CLOUDS, BUILDING OUTLINES, SAFETY CLASS/PIPING CLASS BOUNDARIES & LEADERS
[Symbol]	EQUIPMENT/LINES SHOWN IN PHANTOM
[Symbol]	HIDDEN LINES, SYS INTERFACE FUTURE DESIGN AND TEMP DESIGN
[Symbol]	SKID/VENDOR PACKAGE OUTLINES & BUILDING OUTLINES (SHEM ONLY)
[Symbol]	ELECTRICALLY TRACED
[Symbol]	STEAM TRACED
[Symbol]	STEAM JACKETED
[Symbol]	DRAWING SEPARATIONS ON OVERVIEWS
[Symbol]	FLOOR ELEVATIONS
[Symbol]	FLOW ARROWS
[Symbol]	REFRIGERANT LINE



LINE CODES

LINE	DESCRIPTION
[Symbol]	SIGNAL LINES
[Symbol]	INSTRUMENT PNEUMATIC
[Symbol]	INSTRUMENT CAPILLARY
[Symbol]	INSTRUMENT HYDRAULIC
[Symbol]	INSTRUMENT LINES, VARIOUS SIGNAL LINES, COMPONENT OUTLINES AND LETTERING.

SYMBOL DESCRIPTION

[Symbol]	INTERLOCK
[Symbol]	INSTRUMENT BELLOWS
[Symbol]	VACUUM RUPTURE DISC
[Symbol]	PRESSURE RUPTURE DISC
[Symbol]	REGULATOR FILTER
[Symbol]	INSTRUMENT REFERENCE (PER ALPHA DESIGNATION)
[Symbol]	LIMIT SWITCH

HYVAC SYMBOLS

SYMBOL	DESCRIPTION
[Symbol]	SUPPLY AIR DUCT SECTION (VERTICAL)
[Symbol]	EXHAUST AIR DUCT SECTION (VERTICAL)
[Symbol]	ROLL FILTER
[Symbol]	COOLING COIL X=M-WATER X=R-REFRIGERANT
[Symbol]	HEATING COIL X=M-WATER X=S-STEAM
[Symbol]	ELECTRIC HEATING COIL
[Symbol]	FIXED LOUVER
[Symbol]	COMBINATION LOUVER
[Symbol]	BACK DRAFT DAMPER
[Symbol]	BALANCING DAMPER
[Symbol]	FIRE DAMPER
[Symbol]	CIRCUIT SETTER OR BALANCING VALVE
[Symbol]	BUTTERFLY DAMPER
[Symbol]	RADIAL MULTI-BLADE DAMPER
[Symbol]	PARALLEL MULTI-BLADE DAMPER
[Symbol]	OPPOSED MULTI-BLADE DAMPER
[Symbol]	VANE AXIAL FAN
[Symbol]	POWER ROOF VENT FAN
[Symbol]	PROPELLER FAN
[Symbol]	CENTRIFUGAL FAN
[Symbol]	HUMIDIFIER X=M-WATER X=S-STEAM
[Symbol]	UNIT HEATER X=M-WATER X=S-STEAM X=E-ELECTRIC
[Symbol]	NORMAL AIR FLOW
[Symbol]	FUEL HANDLING AIR FLOW
[Symbol]	INTERMITTENT AIR FLOW
[Symbol]	EMERGENCY AIR FLOW
[Symbol]	DIAPHRAGM ACTUATOR SPRING RETURN
[Symbol]	PISTON ACTUATOR SPRING RETURN
[Symbol]	PISTON ACTUATOR DOUBLE ACTING

LINE CODES

LINE	DESCRIPTION
[Symbol]	NON-DUCTED AIR
[Symbol]	HYVAC RETURN DUCT
[Symbol]	DUCTED SUPPLY

PIPING SAFETY CLASS FLAGS

[Symbol]	ANS SAFETY CLASS 1 AND ASME III CODE CLASS 1 TO ANS SAFETY CLASS 2 AND ASME III CODE CLASS 2
[Symbol]	ANS SAFETY CLASS 2 AND ASME III CODE CLASS 2 TO ANS SAFETY CLASS 3 AND ASME III CODE CLASS 3
[Symbol]	ANS SAFETY CLASS 2 AND ASME III CODE CLASS 2 TO NON-NUCLEAR SAFETY NON-ASME SECTION III CODE CLASS
[Symbol]	ANS SAFETY CLASS 3 AND ASME III CODE CLASS 3 TO NON-NUCLEAR SAFETY WITH SPECIAL QUALITY REQUIREMENTS
[Symbol]	ANS SAFETY CLASS 3 AND ASME III CODE CLASS 3 TO NON-NUCLEAR SAFETY WITH SPECIAL SEISMIC SUPPORT REQUIREMENTS FOR HYAC OR I&C
[Symbol]	NON-NUCLEAR SAFETY NON-ASME SECTION III CODE CLASS TO NON-NUCLEAR SAFETY DESIGNED TO REMAIN FUNCTIONAL DURING AND AFTER AN SSE
[Symbol]	ANS SAFETY CLASS 2 AND NON-ASME III CODE CLASS TO ANS SAFETY CLASS 3 AND NON-ASME III CODE CLASS
[Symbol]	NON-NUCLEAR SAFETY WITH SPECIAL SUPPORT REQUIREMENTS FOR HYAC OR I&C
[Symbol]	NON-NUCLEAR SAFETY WHICH MUST REMAIN FUNCTIONAL DURING AND AFTER AN SSE
[Symbol]	QUALITY RELATED NON-NUCLEAR SAFETY WITH SPECIAL QUALITY REQUIREMENTS
[Symbol]	ANS SAFETY CLASS 3, NON-ASME III CODE CLASS
[Symbol]	ANS SAFETY CLASS 2, NON-ASME III CODE CLASS
[Symbol]	NON-NUCLEAR, NON-ASME SECTION III CODE CLASS

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

NOTE:
1. CLOSED POSITION MAY DEPICT DIAPHRAM IN A 45° POSITION.

MITD (MASTER INTEGRITY TEST DIAGRAMS) (SEE MITD DWG'S)

[Symbol]	TEST BOUNDARY
[Symbol]	NO TEST REQUIRED
[Symbol]	INITIAL SERVICE
[Symbol]	STANDING WATER
[Symbol]	STANDING FLUID
[Symbol]	PRESSURE DESIGNATIONS NUMERIC CODE
[Symbol]	ALPHA CODE

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
◆ INDICATES SYSTEM BOUNDARY INTERFACE

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
SEABROOK

LEAD SHEET NUCLEAR PIPING & INSTRUMENT DIAGRAMS
SHEET 2 OF 2
LICENSE RENEWAL P&ID

SEABROOK STATION

PID-LEGEND2
REF. DRAWING NO. 8
REV 1
TITLE LEAD SHEET NUCLEAR P & I TO SHEET 2 OF 2

PIID-LRNOTES1

THIS SECTION IS GENERATED TO HELP IN CORRELATION OF COMPONENT NUMBERS AND EQUIPMENT WITHOUT NUMBERS THAT ARE CONTAINED ON THE LICENSE RENEWAL DRAWINGS AND HOW THESE COMPONENTS WERE GROUPED. COMPONENTS GROUPS ARE SHOWN IN SECTIONS 2.3.1, 2.3.2, 2.3.3 AND 2.3.4. THESE SAME COMPONENT GROUPS ARE THE SAME COMPONENT TYPES CONTAINED IN SECTIONS 3.1.2, 3.2.2, 3.3.2 AND 3.4.2 TABLES FOR THE AMR REVIEW. COMPONENTS IN SCOPE AND REQUIRING AN AMR ARE SHOWN BELOW.

AIR CONDITIONER HOUSING
1. (AC)

COMPRESSOR
1. COMPRESSOR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM.

DAMPER HOUSING
1. (DP)
2. DAMPER HAS NO UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING FOR THE ASH SYSTEM

DRIP PAN
1. DRIP PAN FOR COOLING COILS DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
2. DRIP PAN FOR BOTTOM OF AIR CONDITIONING UNIT DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
3. CONDENSATE PAN DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CAH SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
4. RC PUMP DRIP PAN DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE OC SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

DRYER HOUSING
1. (MM)
2. (D)

INSTRUMENTATION ELEMENT
1. (FT)
2. (LG)
3. (MM) IN ASH SYSTEM
4. (LSL)
5. (AIT)
6. (FE)
7. (FG)
8. (OP)
9. (FISL)
10. (FI)
11. (AE)
12. (FOI)
13. (LI)
14. (ME)
15. (MT)
16. (MM)
17. (FS)
18. (RE)
19. (AW)
20. (CE)

EXPANSION JOINT
1. (EP)

FAN HOUSING
1. (FN)
2. BLOWER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING FOR THE AB SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

FILTER
1. (F)
2. (S)
3. (SR)
4. (MM) IN SY SYSTEM
5. (SCREEN)
6. PUMP 2A & 2B LOF DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
7. BIRDSCREEN DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE SWA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

FLAME ARRESTOR
1. (MM) IN THE AB, DG, AND OC SYSTEMS

FLEXIBLE HOSE
1. (MM) IN THE CBA, CBS, CC, CS, DG, DW, MM, RC, SA, SS AND WL SYSTEMS
2. (EP) IN THE SA SYSTEM
3. FLEXHOSE OR FLEX HOSE
4. HOSE

FILTER ELEMENT
1. FILTER ELEMENTS ARE THE SCREEN PORTION OF (S) COMPONENTS THAT REQUIRE FILTRATION AND THE FILTER ELEMENTS ARE NOT SHOWN ON LICENSE RENEWAL DRAWINGS THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

HEATER HOUSING
1. (H)
2. (UH) HEATING COIL IS IN SCOPE FOR LEAKAGE BOUNDARY (SPATIAL)

HEAT EXCHANGER
1. (E)
2. (UH) COILS AND FINS CONTAINED IN ASH SYSTEM
3. (AC) COILS AND FINS
4. EVAPORATOR IN THE CBA SYSTEM
5. CONDENSER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA AND CS SYSTEM THEREFORE A GENERIC NUMBER WAS GENERATED.
6. COMPRESSOR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
7. (MM) IN THE DG SYSTEM
8. (D) IN THE IA SYSTEM
9. (MM) IN THE IA SYSTEM
10. PUMP 12B OIL COOLER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM THEREFORE A GENERIC NUMBER WAS GENERATED.
11. PUMP 2A AND 2B LO COOLER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM THEREFORE A GENERIC NUMBER WAS GENERATED.

MUFFLER
1. (MM) IN THE DG SYSTEM

NOZZLES
1. NOZZLES DO NOT HAVE UNIQUE TAG NUMBERS ON DRAWINGS AND ARE CONTAINED IN THE CBS SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
2. NOZZLES DO NOT HAVE UNIQUE TAG NUMBERS ON DRAWINGS AND ARE CONTAINED IN THE SW SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

DRIFICE
1. (FE)
2. (RD)
3. (FD)
4. MIXING DRIFICE SHOWN ON DRAWING IN THE RMW SYSTEM DOES NOT HAVE A UNIQUE TAG NUMBER ON THE DRAWING THEREFORE A GENERIC NUMBER WAS GENERATED.

DRIFICE CLASS 1
1. (RD)
2. (FE)

HIGH PRESSURE PUMP
1. (P)

PIPING AND FITTINGS (INCLUDED IN THIS GROUPING IS TUBING AND INSTRUMENT TUBING) THERE ARE NO UNIQUE TAG NUMBERS ON LICENSE RENEWAL DRAWINGS FOR PIPING AND FITTINGS THEREFORE GENERIC TAG NUMBER WAS GENERATED FOR EVALUATION.
1. (F) IN THE CAH SYSTEM
2. (MM) IN THE CBA, CS, DG, FO, FP, FW, AND NG SYSTEMS
3. PIPE IN THE DG AND FP SYSTEMS
4. (RC)
5. (WG)
6. (BJ)
7. (SA)
8. (F) SILENCER IN THE IA SYSTEM
9. (CD)
10. (DR)
11. MANWAY DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE AB AND DG SYSTEM.
12. VINYL TUBING DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM.
13. SEAL TRAP DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBA SYSTEM.
14. OVERFLOW LINE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBS SYSTEM.
15. FLUSH CONN. DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBS SYSTEM.
16. FLG. CONN. DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBS SYSTEM.
17. CONCENTRIC GUARD PIPE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBS SYSTEM.
18. MANHOLE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CBS AND FW SYSTEM.
19. CAP DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM.
20. MANIFOLD DRAIN DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE DG SYSTEM.
21. CO DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE DR SYSTEM.
22. LOOP SEAL DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE DW SYSTEM.
23. FILL CONNECTION DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE DW SYSTEM.
24. PLUG FITTING DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE DW, FW, MS AND RC SYSTEMS.
25. BLIND FLANGE DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE FP SYSTEM.
26. DELUGE VALVE PRIMING LINE DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL IN THE FP SYSTEM.
27. FORGING DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE FW SYSTEM.
28. EQUALIZING OIL RESERVOIR DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE FW SYSTEM.
29. MECH. SEAL FLUSH CONN. DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE FW SYSTEM.
30. FORGING (202444-1, -2, -3, -4, -9, -10, -11 AND -12) DO NOT HAVE UNIQUE NUMBERS ON LICENSE RENEWAL DRAWING IN THE MS SYSTEM.

31. NOISE SILENCER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE OC SYSTEM.
32. CLEANOUT DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE OC SYSTEM.
33. HAND HOLE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE OC SYSTEM.
34. SWAGelok UNION DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
35. CAPILLARY DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
36. INNER SEAL MONITOR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
37. OUTER SEAL MONITOR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
38. CAPILLARY TUBES DO NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
39. RUPTURE DISCS DO NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
40. OIL MANIFOLD DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE IA SYSTEM.

PIPING AND FITTINGS CLASS 1 (THERE IS NO UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWINGS THEREFORE GENERIC TAG NUMBER WAS GENERATED FOR EVALUATION).
1. CROSSOVER LEG DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
2. HOT LEG DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
3. COLD LEG DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
4. INCORE INSTRUMENT GUIDE TUBE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.
5. PRESSURIZER SURGE LINE DOES NOT HAVE UNIQUE TAG NUMBERS ON LICENSE RENEWAL DRAWING IN THE RC SYSTEM.

PIPING AND FITTINGS CLASS 1 < 4 INCHES (THERE IS NO UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWINGS THEREFORE GENERIC TAG NUMBER WAS GENERATED FOR EVALUATION).
PIPING AND FITTINGS CONTAINMENT ISOLATION (THERE IS NOT UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWINGS THEREFORE GENERIC TAG NUMBER WAS GENERATED FOR EVALUATION).

PIPE ELEMENT
1. (LG) GLASS PORTION
2. (MM) GLASS PORTION IN ASC AND FP SYSTEM.
3. (FG) GLASS PORTION
4. (FI) GLASS PORTION

PUMP
1. (P)

CLASS 1 PUMP
1. (P)

RECOMBINER
1. (MM) IN THE CGC SYSTEM

SCREEN
1. (S) IN THE CBS SYSTEM

SPRINKLER (THERE IS NO UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWINGS THEREFORE GENERIC TAG NUMBER WAS GENERATED FOR EVALUATION).

STRAINER
1. (STR)

TANK
1. (TK)
2. (DM)
3. (MM) IN THE CS, DF, DG, DW, HW, MM AND SS SYSTEM
4. (E) MOISTURE SEPARATOR IN THE IA SYSTEM
5. PUMP 12B FLUID DRIVE TAG NUMBER DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
6. PUMP 2A AND 2B GEAR DRIVE DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
7. PUMP 2A AND 2B RESERVOIR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE CS SYSTEM.
8. HYDRAULIC FLUID RESERVOIR DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE MM SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
9. GEAR CASE SUMP DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE IA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.
10. OIL RESERVOIR DOES NOT HAVE UNIQUE NUMBER ON LICENSE RENEWAL DRAWING IN THE IA SYSTEM.

THERMOWELL
1. (TW)

THERMOWELL CLASS 1
1. (TW)

TRAP
1. (T)
2. (MM) SEPARATOR IN IA SYSTEM

TURBINE
1. (TD)

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.
▲ PIPE ANCHOR
◊ INDICATES SYSTEM BOUNDARY INTERFACE

VALVE BODY
1. (FCV)
2. (FV)
3. (MM) IN THE AB AND PW SYSTEMS
4. (V)
5. (PCV)
6. (TCV)
7. (TV)
8. (PIT)
9. (SV)
10. (CV)
11. (HCV)
12. (LCV)
13. (LV)
14. (FY)
15. (PV)
16. (FH)
17. (MCS)
18. (PY)
19. (RV)
20. HYDRAULIC CYLINDER DOES NOT HAVE UNIQUE TAG NUMBER ON LICENSE RENEWAL DRAWING IN THE IA SYSTEM THEREFORE A GENERIC TAG NUMBER WAS GENERATED.

VALVE BODY CLASS 1
1. (V)
2. (LCV)
3. (PCV)

VALVE BODY CONTAINMENT ISOLATION
1. (V)
2. (FV)

REV	DATE	DSGN	CHKD	CE	DESCRIPTION

ORIGINAL ISSUE

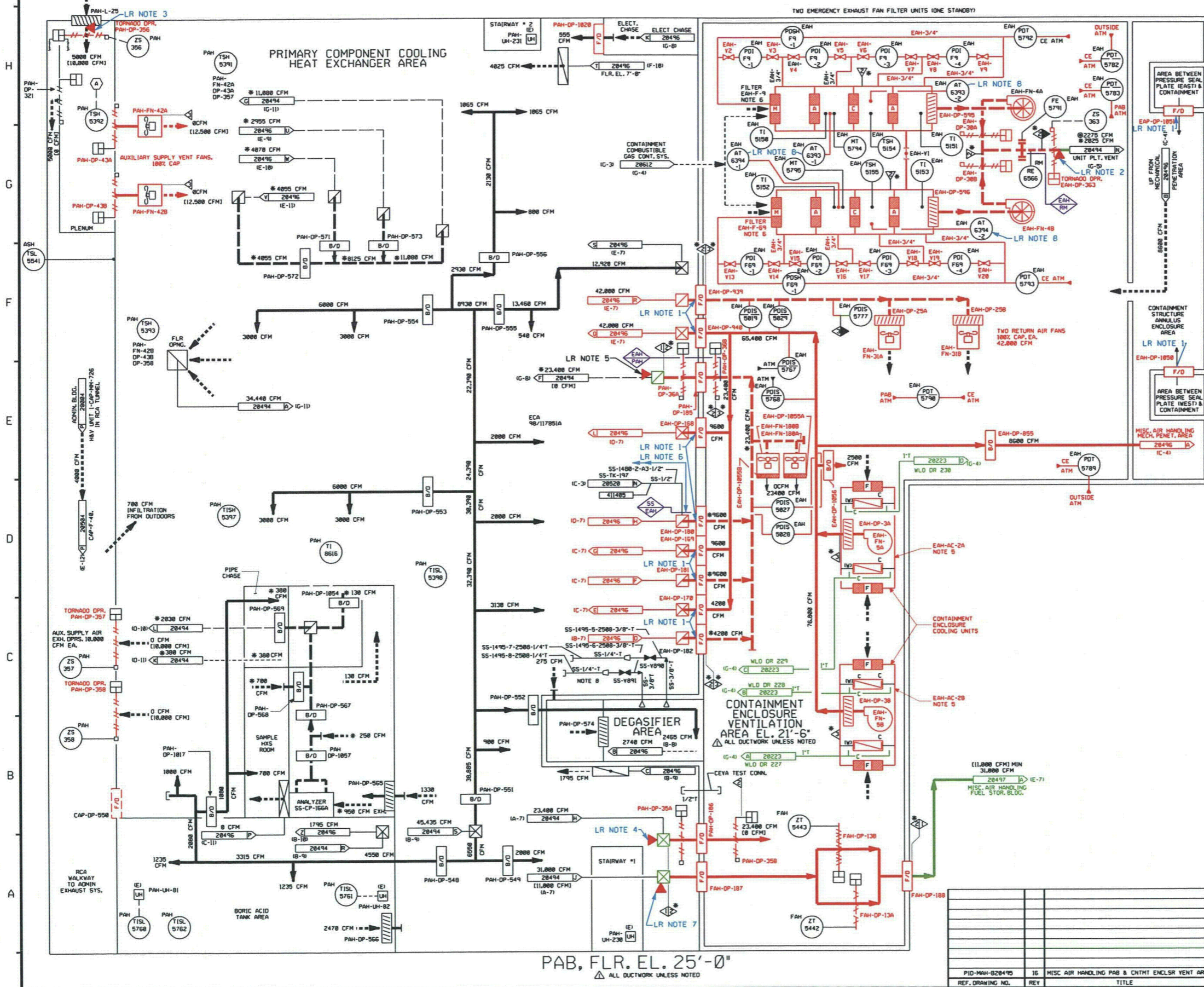
NEXTERA ENERGY
SEABROOK

LR GENERIC NOTES
SHEET 1
LICENSE RENEWAL P&ID

PIID-LRNOTES1

PID-1-MAH-LR20495

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2



COMPONENTS SUBJECT TO AMR
 RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
 BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
 GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
 ◆ INDICATES SYSTEM BOUNDARY INTERFACE
 EAH - CONTAINMENT ENCLOSURE AIR HANDLING SYSTEM
 PAH - PRIMARY AUXILIARY BUILDING AIR HANDLING SYSTEM
 SS - SAMPLE SYSTEM
 RM - RADIATION MONITORING SYSTEM

- NOTES:**
- WORK THIS DWG. WITH DWGS. 20492, 20494 & 20496 THRU 20500.
 - SYSTEM PREFIXES:
 PAH - PRIMARY AUX. BLDG. AIR HANDLING
 EAH - CONTAINMENT ENCLOSURE AIR HANDLING
 FAH - FUEL STORAGE BLDG. AIR HANDLING
 CAP - CONTAINMENT AIR PURGE
 SS - SAMPLE SYSTEM
 - FOR SYMBOL LEGEND SEE NOTE 3 ON DWG. MAH 20494.
 - INSTRUMENT REFERENCES:
 (A) TO PAH-FN-147 ON DWG. MAH 20494.
 - COMPONENT COOLING FOR THE COOLING COILS IN AC-2A & 2B ARE ON DWGS 1-CC-20205 & 1-CC-20211 RESPECTIVELY.
 - FILTER HOUSING DIFFERENTIAL PRESSURES & REQUIRED FLOWS:
- | FILTER TAG NO | CLEAN FLOW CFM | DIRTY FLOW CFM | ANSI DIRTY FLOW CFM | SURVEILLANCE TEST FLOW CFM | SURVEILLANCE TEST FLOW + 10% CFM | SURVEILLANCE TEST FLOW - 10% CFM |
|---------------|----------------|----------------|---------------------|----------------------------|----------------------------------|----------------------------------|
| EAH-F-9 | 2275 | 2100 | 2025 | 2100 | 2310 | 1890 |
| EAH-F-5 | 2275 | 2100 | 2025 | 2100 | 2310 | 1890 |
7. ▲ INDICATES REVISION LEVEL
 8. AIR SAMPLE STATION

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

- LR NOTES:**
- FIRE DAMPERS (FD) ARE IN SCOPE FOR (a)(3) FIRE PROTECTION (FP).
 - DUCTWORK SUPPORT EQUIVALENT ANCHOR
 DWG NO.: 9763-F-604115
 HANGER: CONCRETE PIPE SLEEVE ABOVE DAMPER.
 - DUCTWORK SUPPORT ANCHOR
 DWG NO.: 604120 (B-2)
 BASED ON ENGINEERING EVALUATION
 NO EQUIVALENT ANCHOR REQUIRED
 - DUCTWORK SUPPORT ANCHOR
 DWG NO.S: 609115 (B-4) AND 609109 (A-1)
 HANGERS: FN-6A-66 AND -67
 - DUCTWORK SUPPORT ANCHOR
 DWG NO.: 609115 (D-2)
 HANGERS: FN-6A-91 AND -93
 - THIS PORTION OF THE SAMPLE SYSTEM PIPE HAS AN AIR/GAS INTERNAL ENVIRONMENT.
 - DUCTWORK SUPPORT ANCHOR
 DWG NO.S: 609109 (A-1) AND 609110 (A-3)
 HANGER: FN-6A-175 AND FN-6A-174.
 - SMOKE DETECTORS AND SENSORS ARE IN SCOPE FOR (a)(3) FIRE PROTECTION.

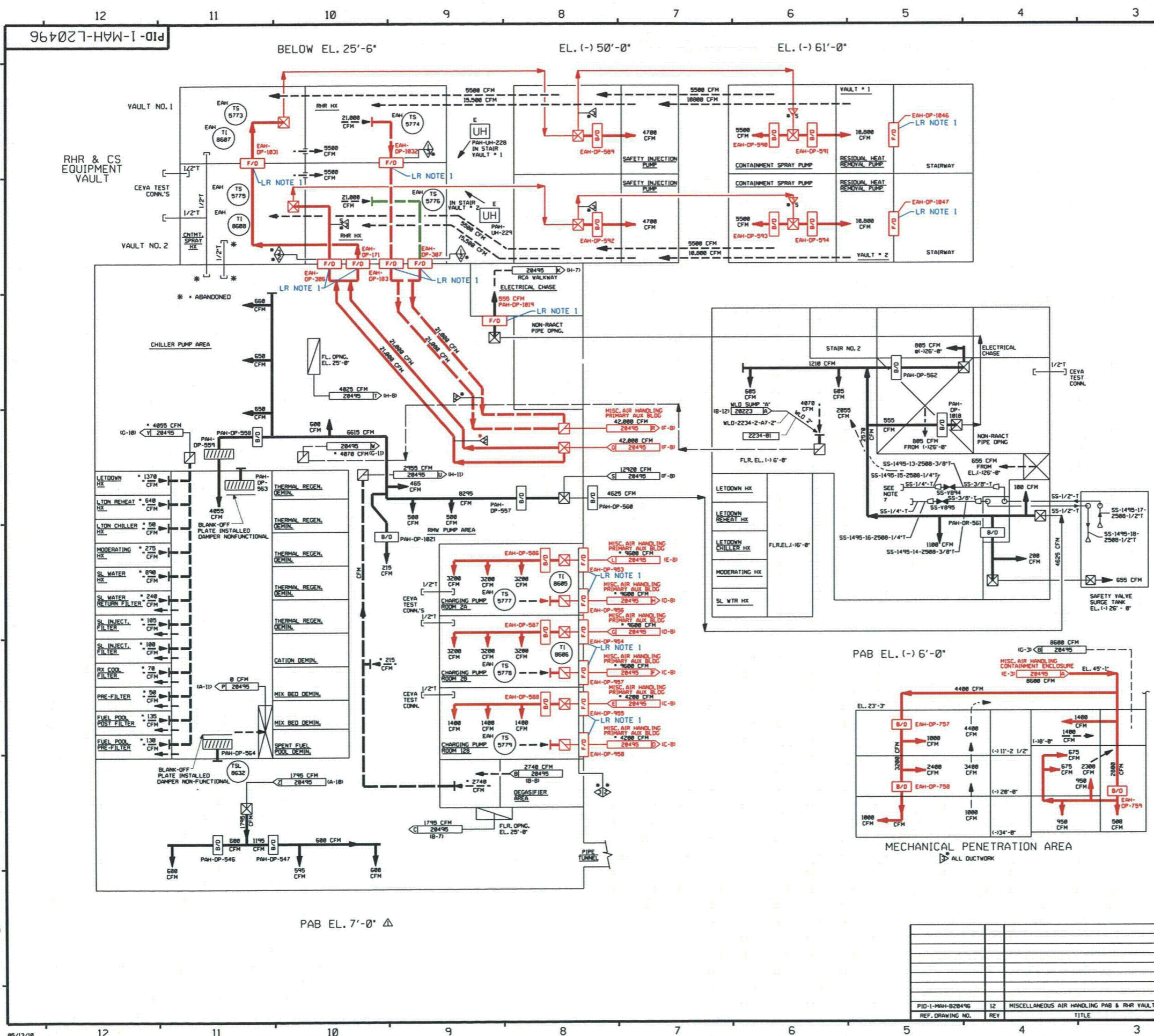
REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

NEXTERA ENERGY
 SEABROOK

MISCELLANEOUS AIR HANDLING PAB & CONTNMENT ENCLSURE VENTILATION AREA DETAIL LICENSE RENEWAL DIAGRAM

PID-1-MAH-LR20495

PAB, FLR. EL. 25'-0"
 ▲ ALL DUCTWORK UNLESS NOTED



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LRLEGEND 1 AND P&ID - LRLEGEND 2

LR NOTES:
1. FIRE DAMPERS (F/D) ARE IN SCOPE FOR 10CFR 54.4(a)(3), FIRE PROTECTION (FP).

COMPONENTS SUBJECT TO AMR
RED INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(1) AND/OR (a)(3) AND SUBJECT TO AMR PER 10CFR 54.21.
BLACK INDICATES COMPONENTS NOT SUBJECT TO AMR.
GREEN INDICATES COMPONENTS IN SCOPE PER 10CFR 54.4(a)(2) AND SUBJECT TO AMR PER 10CFR 54.21.

▲ PIPE ANCHOR
◇ INDICATES SYSTEM BOUNDARY INTERFACE

- NOTES:
1. WORK THIS DRAWING WITH 20492, 20494, 20495 & 20497 THRU 20500.
 2. SYSTEM PREFIXES:
PAH - PRIMARY AUX. BLDG. AIR HANDLING
EAH - CONT. ENCLOSURE AIR HANDLING
COP - CONTAINMENT ON-LINE PURGE
SS - SAMPLE SYSTEM
 3. Δ ALL DUCTWORK, UNLESS NOTED.
 4. FOR SYMBOL LEGEND, SEE NOTE 3 ON DWG. MAH 20494.
 5. * DENOTES AIR FLOW RATE AT ANSI N-510-1980 TEST REQUIREMENT.
 6. Δ INDICATES REVISION LEVEL
 7. AIR SAMPLE STATION

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	ORIGINAL ISSUE	DESCRIPTION

MISCELLANEOUS AIR HANDLING PAB & RHR VAULTS DETAIL LICENSE RENEWAL DIAGRAM

PID-1-MAH-20496	12	MISCELLANEOUS AIR HANDLING PAB & RHR VAULTS
REF. DRAWING NO.	REV	TITLE

PID- 1-MAH-LR20496