

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

APR1400 Design Certification

Korea Electric Power Corporation / Korea Hydro & Nuclear Power Co., LTD

Docket No. 52-046

RAI No.: 531-8715
SRP Section: 10.4.9 – Auxiliary Feedwater System (PWR)
Application Section: 10.04.09
Date of RAI Issue: 11/28/2016

Question No. 10.04.09-7

10 CFR 50.59(a) requires that information provided to the NRC by applicants for a license be complete and accurate in all material respects. The staff has found inconsistencies in the pipe size shown in DCD Figure 10.4.9-1 for the auxiliary feedwater pump suction lines. Specifically, the line leaving tanks TK10A and TK10B, on sheet 1 of Figure 10.4.9, are shown as 12 inches in diameter. The line from tank TK10A is divided into two 6-inch diameter lines which supply water to AFW pumps A and C. The line from tank TK10B is divided into two 8-inch diameter lines which supply water to AFW pumps B and D. These four suction lines (supplying water to pumps A through D) are shown on sheet 1 of Figure 10.4.9-1 and continued onto sheet 2 of Figure 10.4.9-1; however, on sheet 2, these 4 lines are shown as 10-inch diameter lines.

The applicant is requested to:

- (a) Reconcile the above noted discrepancies regarding the line size of the piping that supplies the AFW pumps with water from the AFWSTs and eliminate the inconsistencies in sheet 1 and 2 of Figure 10.4.9-1.
- (b) If the line sizes for the two AFW division are meant to be different, provide a discussion of why different line sizes are used for the different AFW divisions since the flow requirements for both divisions are the same, and provide the reason both line sizes are acceptable in the design.

Response

There were editorial errors in figure 10.4.9-1(1 of 3 and 2 of 3). The auxiliary feedwater pump suction line size branched from 12 inch common line of each auxiliary feedwater storage tank, is 8 inch instead of 6 inch or 10 inch. The different line sizes on figure 10.4.9-1 (1 of 3 and 2 of 3) in the DCD will be revised from 6 inch and 10 inch to 8 inch.

Impact on DCD

DCD Tier 2, Figure 10.4.9-1(1 of 3 and 2 of 3) will be revised as indicated on the attached markup.

Impact on PRA

There is no impact on the PRA.

Impact on Technical Specifications

There is no impact on the Technical Specifications.

Impact on Technical/Topical/Environmental Reports

There is no impact on any Technical, Topical, or Environmental Report.

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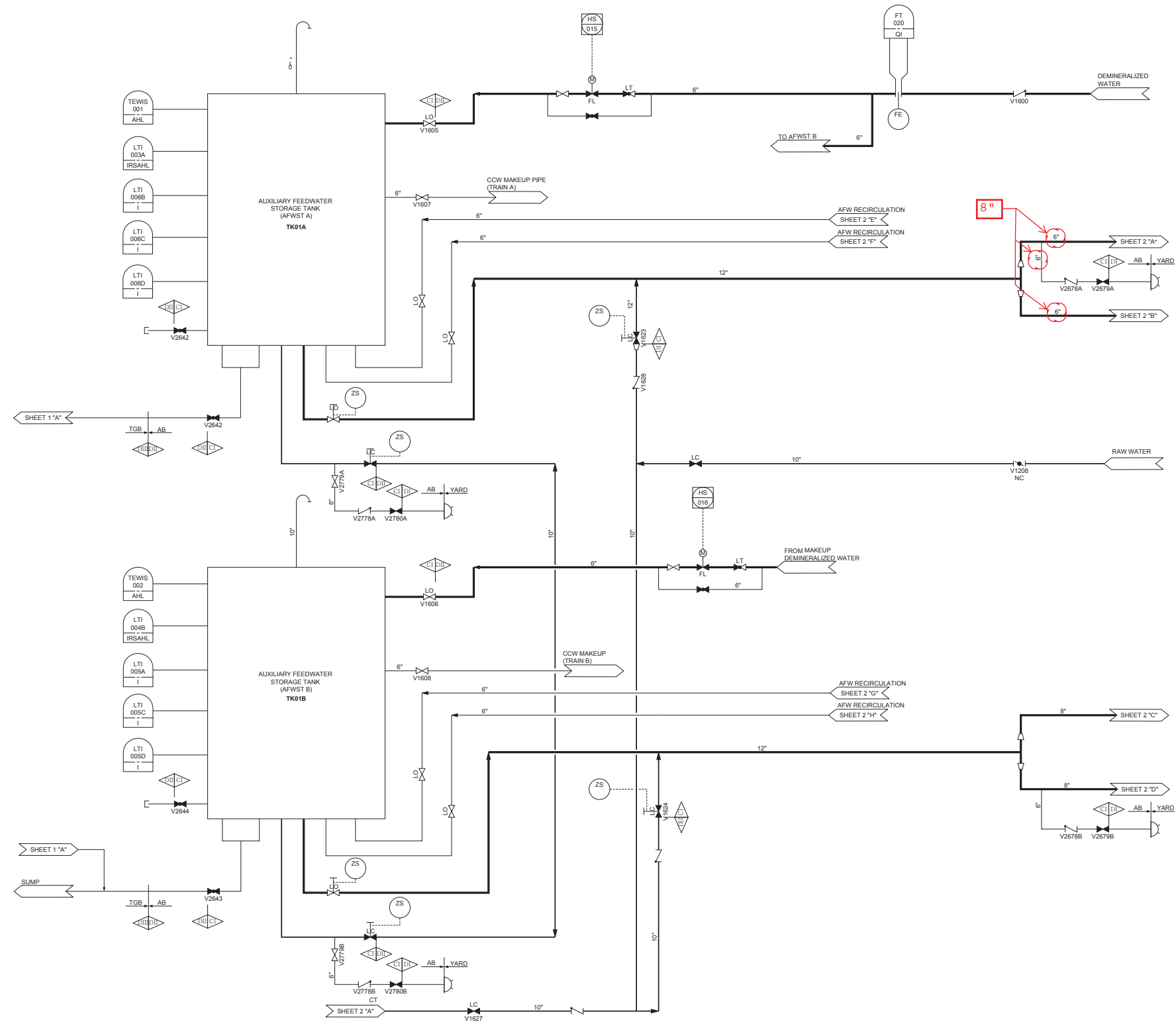


Figure 10.4.9-1 Auxiliary Feedwater System Flow Diagram (1 of 3)

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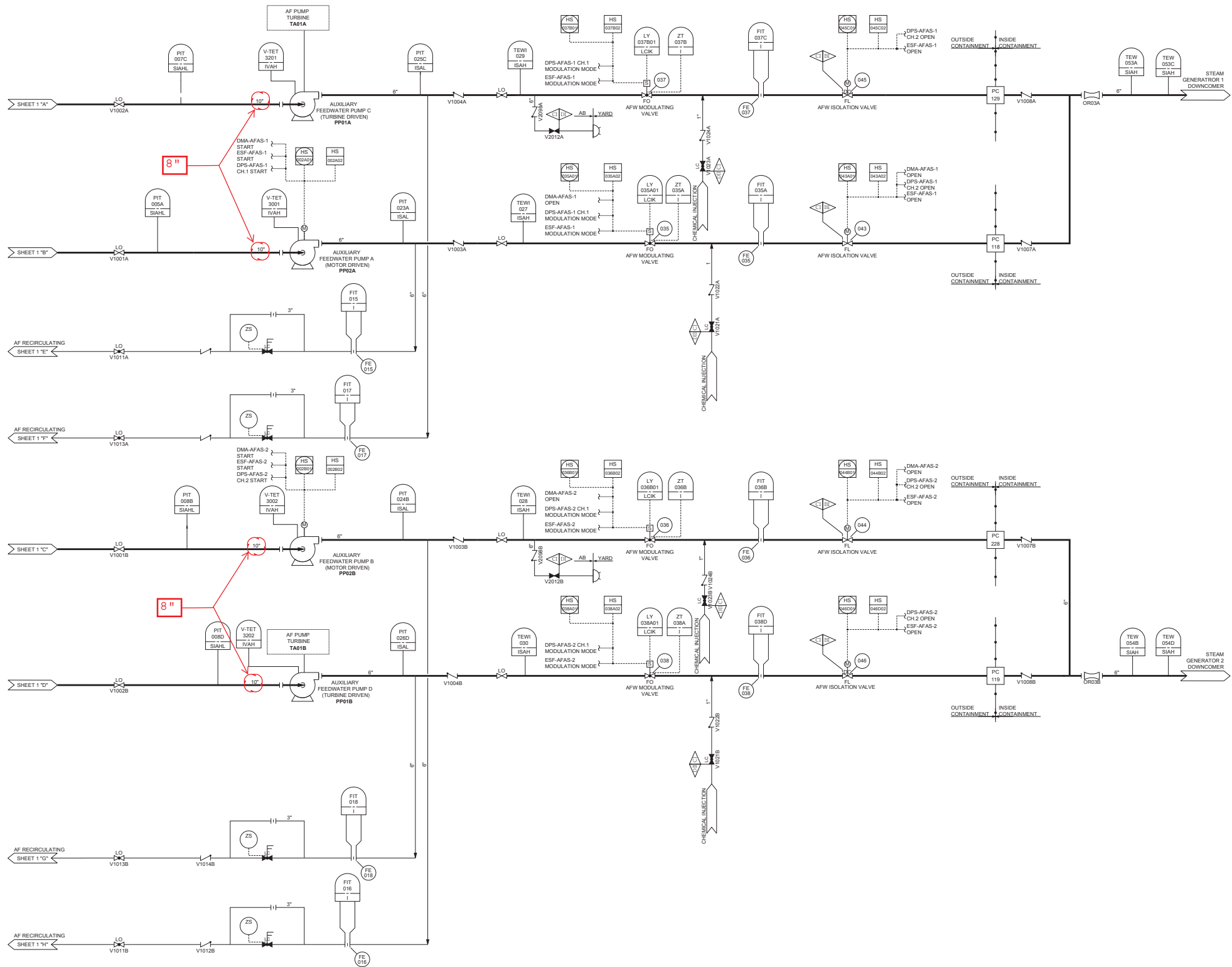


Figure 10.4.9-1 Auxiliary Feedwater System Flow Diagram (2 of 3)