

REVISED 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.: 2-7371 Question 13
SRP Section: N/A
Application Section: Fluidic Device Design for the APR1400
(APR1400-Z-M-TR-12003-P, Rev. 0)
Date of RAI Issued: 03/11/2014

Question 13

Figure A-5 of Appendix A of the TR, titled "Drawing of the SIT and FD of the VAPER Facility," shows the drawing of the discharge pipe connected to the exit nozzle, with the inside diameter of the discharge pipe of []^{TS} mm. This appears to be contrary to the statement in Sections 4.1.3 and 5.1 that the inner diameter of the discharge pipe line of the VAPER test facility is []^{TS} mm, which is also different from the diameter of the SI discharge line ([]^{TS}) of the APR1400.

- Do figures in Appendix A represent the dimensions for the VAPER test facility or the APR1400 design?
- Are the drawings of the exit nozzle drawing and discharge pipe in Figures A-4 and A-5 representing VAPER facility or APR1400?
- What are the exit nozzle dimensions for the VAPER facility and APR1400?

Response

- Figures A-1 to A-4 in Appendix A of the TR represent the dimensions for the VAPER test facility. But, figures A-5 represents neither the VAPER test facility nor the APR1400 design. Figure A-5 was inadvertently included in the report. The TR will be revised replacing this figure with the correct figure, which represents the dimension for the VAPER test facility.
- Figure A-5 represents neither the VAPER test facility nor the APR1400 design. Figure A-4, which is a correct figure, represents the VAPER test facility. Figure A-5 was inadvertently included in the report. The TR will be revised replacing this figure with the correct figure, which represents the dimension for the VAPER test facility.
- Figure RAI-13-1 shows the discharge tube of the VAPER SIT-FD. Figure RAI-13-2 and RAI-13-3 show the exit nozzle and discharge tube of the APR1400 SIT-FD. Major dimensions of each of the exit nozzle and discharge tube are presented in Table RAI-13.

Impact on DCD

There is no impact on the DCD.

Impact on PRA

There is no impact on the PRA.

Impact on Technical/Topical/Environmental Report

Topical Report APR1400-Z-M-TR-12003-P will be revised as indicated on the attached markups.

Impact on Technical Specifications

There is no impact on the Technical Specifications.

Table RAI-13 Dimensions of exit nozzles and discharge tubes of VAPER SIT-FD and APR1400 SIT-FD

TS



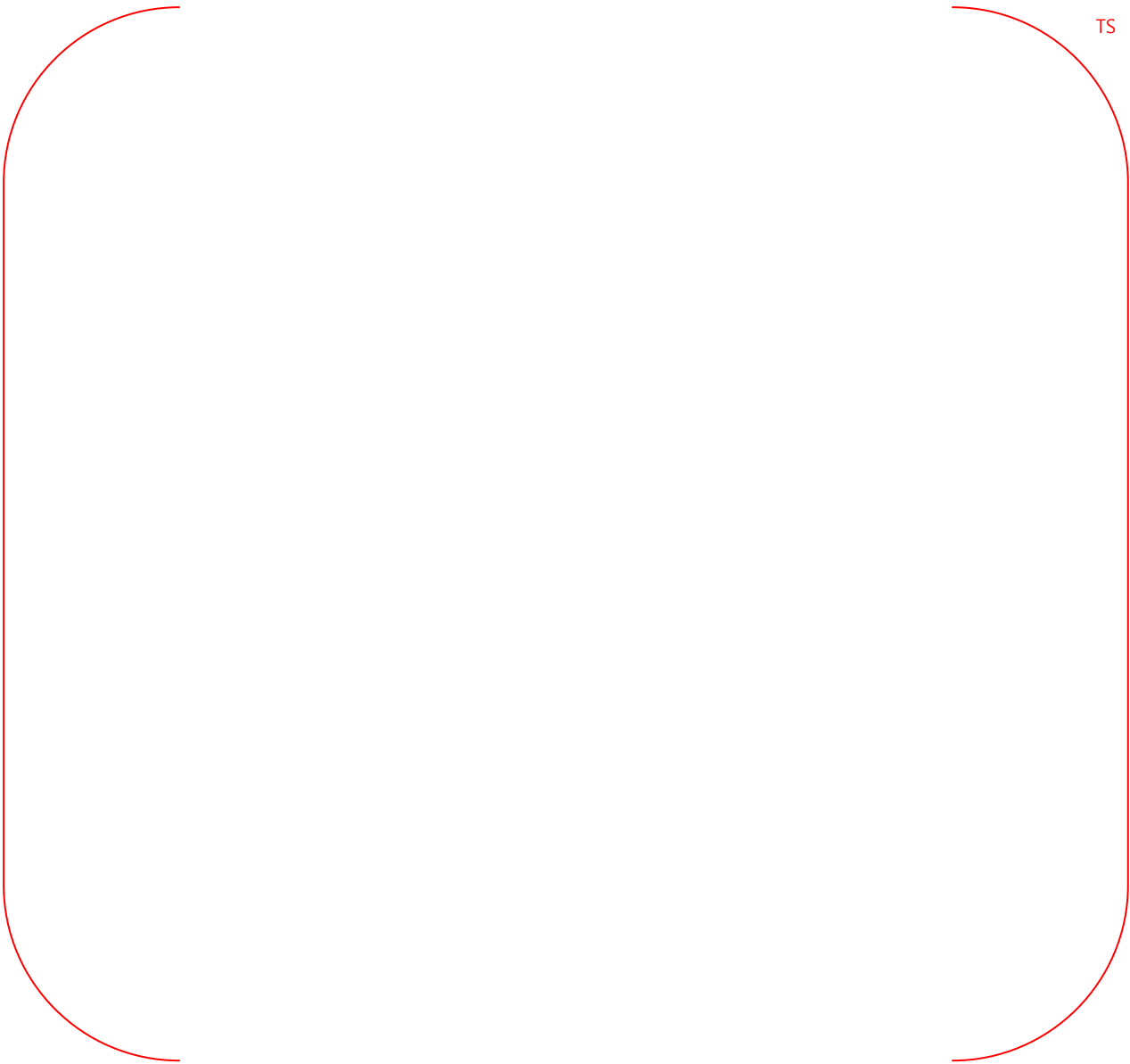


Figure RAI-13-1 Drawing of Discharge Tube of VAPER SIT-FD



Figure RAI-13-2 Drawing of Exit Nozzle of APR1400 SIT-FD

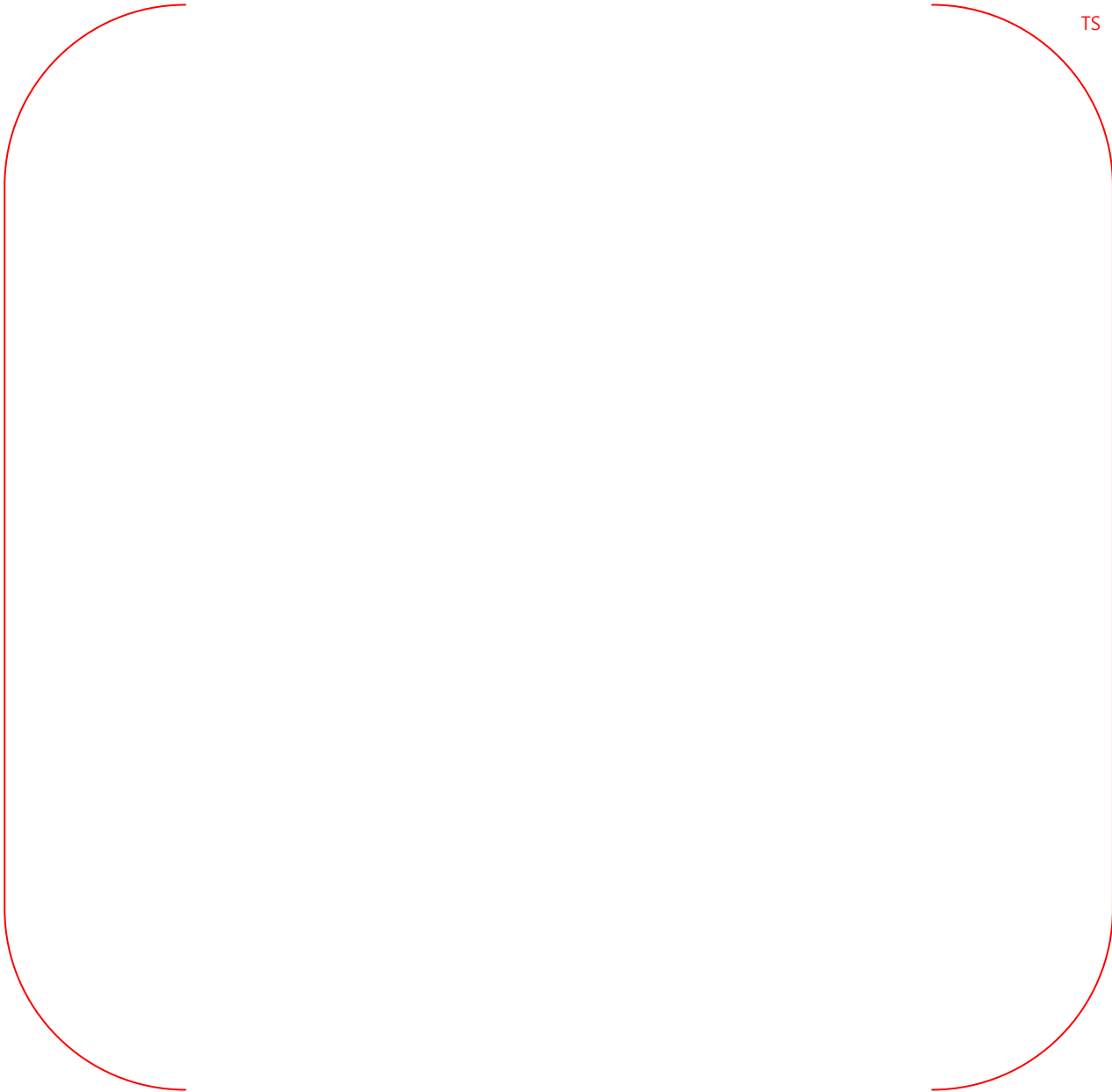


Figure RAI-13-3 Drawing of Discharge Tube of APR1400 SIT-FD

Non-Proprietary

FLUIDIC DEVICE DESIGN FOR THE APR1400

APR1400-Z-M-TR-12003-NP Rev.0

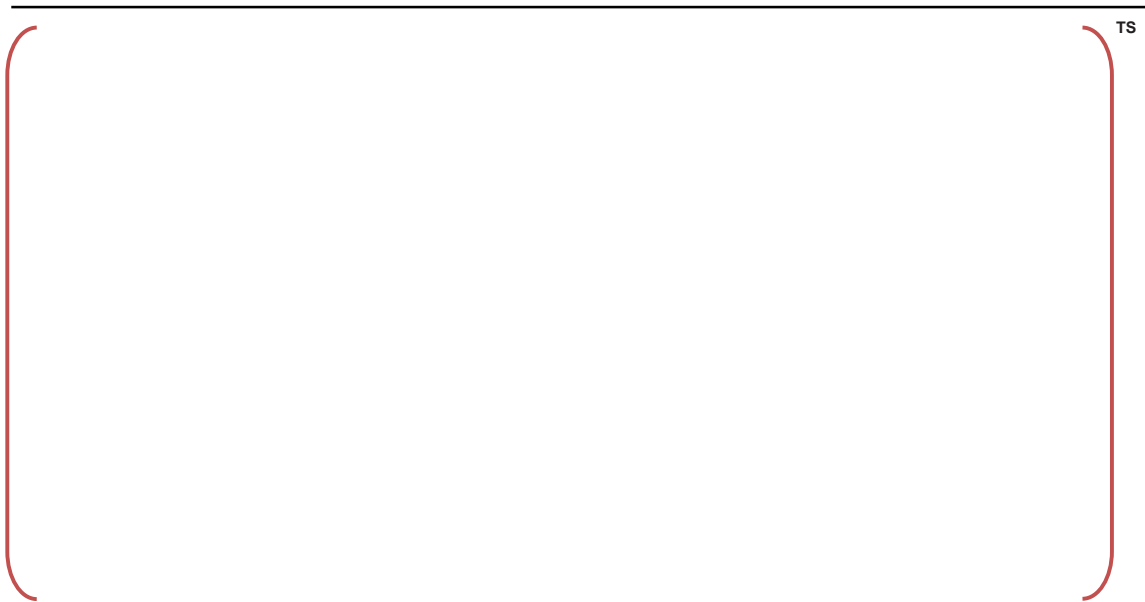


Figure A-4 Drawing of the Exit Nozzle in the Vortex Chamber



Figure A-5 Drawing of the Discharge Pipe connected to the Exit Nozzle

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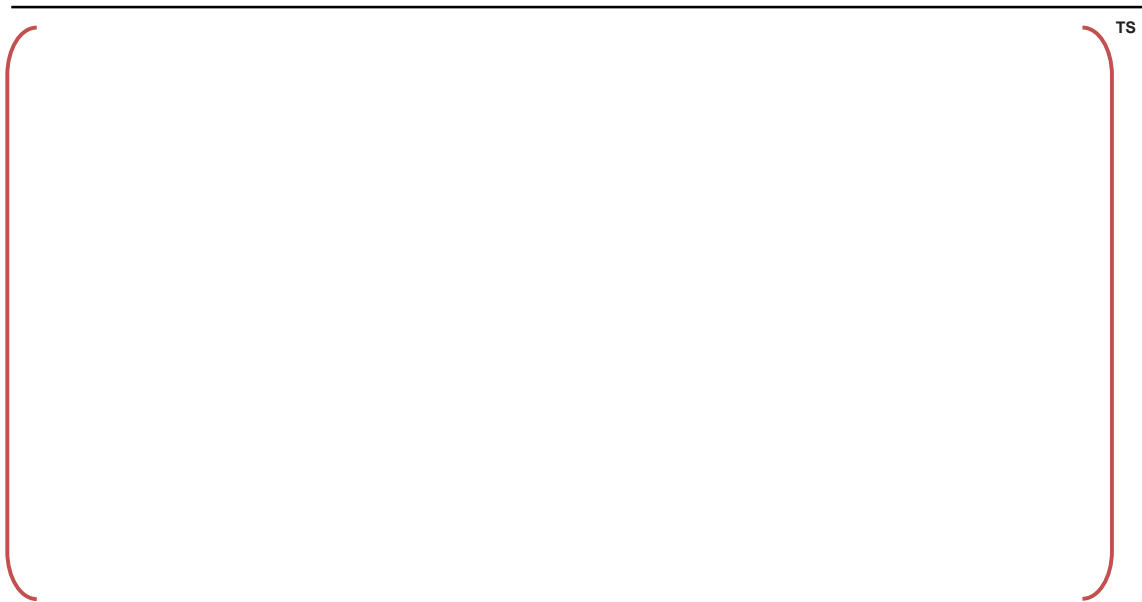


Figure A-4 Drawing of the Exit Nozzle in the Vortex Chamber



Figure A-5 Drawing of the Discharge Pipe connected to the Exit Nozzle