

Attachment 2 Westinghouse Non-Proprietary Class 3

PWROG Comments on the original DSE that were not completely incorporated in the Revised DSE

Table 2 – PWROG Comments on the original DSE that were not completely incorporated in the Revised DSE Non-Proprietary Version					
Comment #	DSE Page No.	DSE Line No.	Comment Type	PWROG Comment	NRC Response
1	15	6	Correct a typographical error	The OG-18-224 comment indicated that 10^2 should be changed to $10D^{2.5}$. This change was made in the title of the paragraph, but not in the last sentence of the paragraph. Therefore 10^2 should be changed to $10D^{2.5}$ in the revised DSE.	
2	18	9-10	Correct an inconsistency	PWROG Comment B.0 of OG-18-224 Attachment B addressed the DSE limitation of TR Equation 6-6 to $1.25 \leq N_{FR} \leq 1.75$. The revised DSE states “TR Eq. 6-6 was incorrectly correctly assumed to hold for $1 \leq N_{FR} \leq 2.25$ with $\beta_{min} reqd = []^{a,c}$ for $N_{FR} > 2.25$.” The word “incorrectly” should be replaced with “correctly” to address the PWROG comment B.0 of OG-18-224 and for consistency with page 47, lines 17 and 18 of the revised DSE.	
3	18	34-35	Correct an inconsistency	PWROG Comment B.0 of OG-18-224 Attachment B addressed the DSE limitation of TR Equation 6-6 to $1.25 \leq N_{FR} \leq 1.75$. The revised DSE states “Eq. 6-6 is not acceptable for use significantly outside of $1.25 \leq N_{FR} \leq 2.25$.” This should be replaced with “Eq. 6-6 is acceptable for use for $1.00 \leq N_{FR} \leq 2.25$, and remains constant for $N_{FR} > 2.25$ ” to address the PWROG comment B.0 of OG-18-224 and for consistency with the revised DSE page 47, lines 17 and 18.	
4	42	14	Correct a typographical error	PWROG Comment B.1 of OG-18-225 Attachment B indicated that RCS Chemical Effects need not be addressed. This comment	

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				was incorporated, but the phrase “With one exception,” should be deleted, since the exception relates to RCS Chemical Effects, which was deleted in the revised DSE.	
5	44 45	47 1-2	Correct the inconsistency	PWROG Comment B.2 of OG-18-225 Attachment B addressed kinematic shock formation and growth in the lower horizontal header. The revised DSE phrase “This was also assumed to indicate that the DC and elbow could accumulate no additional air and air entering the DC would result in the same quantity being expelled into the lower horizontal pipe” should be replaced with “This was also assumed to indicate that the DC and elbow could accumulate no additional air and air entering the DC would accumulate in the lower horizontal pipe.” The shock grows by accumulating air. If the air was expelled then the shock would not grow. The additional air into the DC and elbow accumulates in the lower horizontal header once the DC and elbow cannot accumulate additional air.	
6	46	21-22	Correct an inconsistency	PWROG Comment B.0 of OG-18-224 Attachment B addressed the DSE limitation of TR Equation 6-6 to $1.25 \leq N_{FR} \leq 1.75$. The revised DSE phrase “This is inconsistent with the TR statement that TR Eq. 6-6 covers the NFR range from 1 to 1.9” should be deleted, since this refers to DSE Figure 16 which does not incorporate the 2018 PWROG data. This change is also necessary for consistency with the revised DSE statement on page 47, lines 17 and 18.	
7	46 47	24-26 1-7	Correct an inconsistency	The revised DSE states “The TR assumed linear behaviour could be assumed out to $NFR = 2.25$ and that $\beta = []^{a,c}$ for $NFR > 2.25$. The staff found that a cubic equation was the best fit for TR Eq. 6-6 between $NFR = 1$ and	

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				1.9, which is shown by the dotted line in Figure 17.” DSE Figure 17 does not incorporate the PWROG data obtained in 2018 for $N_{FR} > 2.2$. Incorporation of the 2018 data in Figure 17 would clearly demonstrate that the cubic polynomial does not represent a better fit than TR Eq 6-6. The revised DSE statement that a cubic equation was the best fit for TR Eq. 6-6 between $NFR = 1$ and 1.9 is also inconsistent with the statement on page 47, lines 9-18 of the revised DSE.	