

RT-2A34

**From:** <BUELRF@inel.gov>  
**To:** "David Loveless" <DPL@nrc.gov>  
**Date:** Tue, Aug 3, 2004 1:05 PM  
**Subject:** Cooper Model Comparisons

Dave,

I have reviewed the four models that you sent to me and have identified the differences between them. I compared the NRC-Base to the NPPD-Base and I compared the NRC-Current to the NPPD-Current.

#### NRC-Base to the NPPD-Base

The only logic difference between the two models was in the 'DG-ESW fault tree under gate "DG-ESW-ESW". The NPPD model used a 2/4 gate while the NRC model used a 3/4 gate at this location. It appears that the NPPD model is correct in that it agrees with our base model.

The only other model difference is in the data values for the EDGs failing to run. The NPPD-Base model incorrectly uses a 3.5 hour mission for EPS-DGN-FR-FTRM in lieu of the correct 13.5 hour mission used in the NRC-Base model. Similarly, the EPS-DGN-FR-FTRL values also differ.

#### NRC-Current to the NPPD-Current

The only logic difference between the two models was in the 'DG-ESW fault tree under gate "DG-ESW-ESW". The NPPD model used a 2/4 gate while the NRC model used a 3/4 gate at this location. It appears that the NPPD model is correct in that it agrees with our base model.

The NRC-Current model has removed all of the elements within the following flag sets: LOOP, LOOP-1HR, LOOP-2HR, LOOP-4HR, LOOP-10HR and SBO. For the model to operate correctly, the elements within these flags must be restored.

The only other model difference is in the data values for the EDGs failing to run. The NPPD-Base model incorrectly uses a 3.5 hour mission for EPS-DGN-FR-FTRM in lieu of the correct 13.5 hour mission used in the NRC-Base model. Similarly, the EPS-DGN-FR-FTRL values also differ.

I did not perform a Current-vs-Base comparison but I can if so desired.

Thanks,  
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