

S2M SBLOCA Model at PVNGS

APS/Westinghouse Meeting
with NRC

June 26, 2003



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◆ Background

- The S2M EM Generic Topical Report was approved by the NRC in December of 1997 for all CE PWR's without any Conditions or Limitations related to Core Power
- The NRC SER for the S2M EM concluded the model provided "improved realism" while retaining "significant conservatism"
- The S2M EM is currently the licensing basis for all 3 PV units at 3876 MWt
- In fact, S2M is required to be used by the approved and implemented Zirlo topical



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- The Unit 2 power uprate draft SER proposes a License Condition that would impose the S1M EM at PVNGS on the basis that S2M has not been approved for power levels above 3400 MWt
- This proposal is contrary to NRC's approval of the S2M EM
- The NRC is using the PV docket and this licensing action to reopen the evaluation of an approved EM
- The proposed License Condition (workaround) in the Unit 2 power uprate draft SER creates a licensing basis problem for all 3 PV units not just PV Unit 2



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- We do not see a clear success path through this problem if we are required to revert to S1M due to the complexities it introduces into our current licensing basis
- The power uprate SER would have to supersede previous License Amendment SERs as well as approved topical report SERs



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◆ GOALS for this meeting

- Gain acceptance that the S2M Evaluation Model, as originally approved by the NRC in the existing SER, is not power level dependent and, as such, is applicable at 3990 MWt
- Obtain a mutually agreed upon schedule for a revision to the applicable section of the Power Uprate draft SER for PVNGS-2



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◆ Success path for achieving stated goals

- The requested sensitivity calculations have been completed
- These demonstrate that the S2M hot rod heatup calculation is not uniquely impacted by variations in core power
- The NRC accepts the applicability of the S1M to PVNGS-2 at 3990 MWt, and
- The blowdown hydraulics calculation for the S2M is essentially identical to that of the S1M, therefore
- It is appropriately concluded that the S2M EM is applicable to a core power level of 3990 MWt

