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## Item C-6: LOCA Heat Sources (Rev. 1)

### DESCRIPTION

#### *Historical Background*

As identified in NUREG-0471,<sup>1</sup> this issue involved staff evaluations of vendors' data and approaches for determining LOCA heat sources and developing staff positions as needed. The contributors to LOCA heat sources, along with their associated uncertainties and the manner in which they are combined, have an impact on LOCA calculations.

The staff evaluated the combined effect of power density, decay heat, stored energy, fission power decay, and their associated uncertainties with regard to calculations of LOCA heat sources.

#### *Safety Significance*

No significant change in public risk is attributed to this issue.

### CONCLUSION

In accordance with a DSI memorandum,<sup>2</sup> the staff informed the Commission<sup>3</sup> of their intent to allow the statistical combination of heat sources to justify the relaxation of non-required conservatisms in ECCS evaluation models. Also, the proposed ECCS rule change being developed by the staff would allow the statistical combination of LOCA heat sources. Thus, this issue is a resolved Regulatory Impact issue.

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<sup>1</sup> NUREG-0471, "Generic Task Problem Descriptions (Categories B, C, and D)," U.S. Nuclear Regulatory Commission, June 1978.

<sup>2</sup> Memorandum for W. Minners from B. Sheron, "Generic Issues C-4, C-5, C-6," May 29, 1985. [8506100882]

<sup>3</sup> SECY-83-472, "Emergency Core Cooling System Analysis Methods," U.S. Nuclear Regulatory Commission, November 17, 1983. [8401060169]

