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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC. 20555
ATTENTION: MS. L. C. FIELDS

Dear Ms. Fields:

SUBJECT: IRIS OVERVIEW PAPERS

Enclosed are copies of IRIS (International Reactor Innovative and Secure) papers (see Table 1) which are provided in response to an NRC request to provide background information as part of the IRIS pre-application review. The papers are transmitted on an enclosed CD-ROM. They may all be accessed by opening the "IRIS Reactor Public Information.pdf" file in the "IRIS Papers CD" directory.

The eleven papers include information on overall approach and philosophy, design status, and systems and components design. They provide a general overview of IRIS, the basic principles of design, safety analysis, and computational methods. These papers are only intended to provide background information for the current pre-licensing effort. Specific topicals intended for pre-licensing review will be submitted in the near future.

All papers are publicly available; therefore, there are no limitations on their distribution.

Please contact Luca Oriani (412) 256-1692 or myself (860) 731-6604 if you have any questions concerning the enclosed material.

Charles L. Kling, Licensing Manager
IRIS Project

Enclosures

cc: M. D. Carelli (W)
C. B. Brinkman (W)
H. A. Sepp (W)

Table 1: ENCLOSURES TO STD-ES-03-8

1. "IRIS Plant Overview," prepared by Westinghouse Electric Co. for the IAEA Advanced Light Water Reactor Report, October 17, 2002
2. M. D. Carelli, et. al., "The Design And Safety Features of the Iris Reactor," Paper ICONE11- 36564, 11th International Conference on Nuclear Engineering, Tokyo, JAPAN, April 20-23, 2003
3. J. M. Collado, "Design of the Reactor Pressure Vessel and Internals of the IRIS Integrated Nuclear System," Proc. of Int. Congress on Advanced Nuclear Power Plants (ICAPP03) Congress Palais, Córdoba (Spain), May 4-7, 2003
4. J.M. Kujawski, et. al., "The IRIS Spool-type Reactor Coolant Pump", Proc. 10th Int. Conf. on Nuclear Engineering (ICONE-10), Arlington, USA, April 14-18, 2002, ASME.
5. L. Cinotti, et. al, "Steam Generator of the International Reactor Innovative and Secure", Proc. 10th Int. Conf. on Nuclear Engineering (ICONE-10), Arlington, USA, April 14-18, 2002, ASME.
6. A. C. O. Barroso, et. al., “IRIS Pressurizer Design”, Proc. of Int. Congress on Advanced Nuclear Power Plants (ICAPP03) Congress Palais, Córdoba (Spain), May 4-7, 2003
7. J. Robertson, et. al., "The IRIS General Plant Arrangement", Proc. 10th Int. Conf. on Nuclear Engineering (ICONE-10), Arlington, USA, April 14-18, 2002, ASME
8. C. Lombardi, et. al., "Internal Shield Design in the Iris Reactor and its Implications on Maintenance and D&D Activities", Proc. 4th Intl. Conf. on Nuclear Option in Countries with Small and Medium Electricity Grids, Dubrovnik, Croatia, June 16-20, 2002
9. L. Oriani, et. al., “Overview of Computational Challenges in the Development of Evaluation Models for IRIS”, ANS Topical Meeting in Mathematics & Computations (M&C), April 6-10, 2003, Gatlinburg, TN, USA
10. Cioncolini, et. al., “Thermal Hydraulic Analysis of Iris Reactor Coiled Tube Steam Generator”, ANS Topical Meeting in Mathematics & Computations (M&C), April 6-10, 2003, Gatlinburg, TN, USA
11. Grgic, et. al., “Development of RELAP5 Nodalization for IRIS Non-LOCA Transient Analyses”, ANS Topical Meeting in Mathematics & Computations (M&C), April 6-10, 2003, Gatlinburg, TN, USA