



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

362 INJUN HOLLOW ROAD • EAST HAMPTON, CT 06424-3099

May 30, 2007
CY-07-087

Docket No. 50-213

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-001

Haddam Neck Plant
Technical Support Document Calculating Future Groundwater Dose
Using the Basement Fill Model

Enclosed please find one copy of the following Technical Support Document (TSD) developed to address the future groundwater dose using the License Termination Plan (LTP) Basement Fill Model. The purpose of this calculation is to determine the projected future groundwater dose using actual concrete core sample analysis data from concrete structures remaining below grade level in the groundwater saturated zone.

TSD CY-HP-0202, Calculation of Future Groundwater Dose Resulting from Residual Radioactivity in Concrete to Remain in the Groundwater Saturated Zone using the CY LTP Basement Fill Model, dated May 23, 2007.

The results of the calculation is that the dose due to future groundwater for remaining containment foundation concrete and other concrete foundations in the former radiologically controlled area is 1.58 mrem/year Total Effective Dose Equivalent (TEDE) and 0.23 mrem/year TEDE for the discharge tunnel and intake structure foundation. Both results are below the target level for future groundwater dose of 2 mrem/year.

If you have any questions regarding this submittal, please contact Mr. Rich McGrath at (860) 267-3573.

Sincerely,

Gerard van Noordennen
Gerard P. van Noordennen
Director, Regulatory Affairs and Quality Assurance

5-30-07
Date

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FSME

Enclosure: TSD CY-HP-0202

cc: S. J. Collins, NRC Region I Administrator
T. B. Smith, NRC Project Manager
L. A. Kauffman, Decommissioning Branch, NRC Region I
E. L. Wilds, Jr., Director, CT DEP Division of Radiation