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SUBJECT: Commits to fuel rod corrosion analysis required by TR
 BAW-10186P-A, "Extended Burnup Evaluation," dtd June 1997.
 Request is for NRC approval of subject TR methods as
 clarified in Framatome Cogema Fuels 971028 ltr to NRC.

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December 16, 1997

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Numbers 50-269, -270, and 287
McGuire Nuclear Station
Docket Numbers 50-369 and -370
Catawba Nuclear Station
Docket Numbers 50-413 and -414
Use of FCF High Burnup Topical Report By Duke
Power Company

References:

1. FCF Topical Report BAW-10186P-A: "Extended Burnup Evaluation", June 1997.
 2. NRC letter from David B. Matthews to J. H. Taylor of Framatome Technologies, Acceptance For Referencing Of FCF Topical Report BAW-10186P: "Extended Burnup Evaluation", April 29, 1997.
 3. FCF letter from J.H. Taylor to Document Control Desk, Application of BAW-10186P-A, Extended Burnup Evaluation, October 28, 1997.
 4. Duke Power Topical Report DPC-NE-2008P-A, "Duke Power Company Fuel Mechanical Reload Analysis Methodology Using TACO3", April 1995.
 5. NRC letter from Herbert N. Berkow to M. S. Tuckman, Duke Power Company's Use Of TACO-3 And The Fuel Rod Gas Pressure Criterion For The Oconee, McGuire, and Catawba Nuclear Stations, April 3, 1995.
 6. NRC letter from Herbert N. Berkow to M. S. Tuckman, Duke Power Use OF CROV Computer Code, June 19, 1995.
- 1/b
a 001

Framatome Cogema Fuels (FCF) submitted the Reference 1 topical report to extend the maximum fuel rod burnups of their fuel designs. In Reference 2, FCF received approval to increase the licensed burnup limit on the Mark-B fuel design to 62,000 MWd/MTU and the Mark-BW17 fuel design to 60,000 MWd/MTU. The Reference 1 topical included a fuel rod cladding corrosion analysis. Subsequent clarification of the application, and interpretation, of the analyses results was documented in Reference 3.

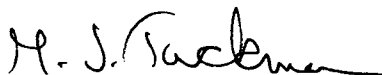
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Duke currently performs fuel rod mechanical reload analyses using the methodology in Reference 4. Since these methods were approved in Reference 5, FCF's extended burnup topical has been approved (Reference 2). The methodology detailed in the BAW-10186P-A topical report has been imported by Duke Power. The NRC has previously reviewed Duke's application of FCF computer codes and methods (Reference 4). The result is that the NRC determined Duke has the technical capability to perform analyses for reload licensing applications (References 5 and 6). The acquisition and use of BAW-10186P-A analyses by Duke is identical to the approach approved by the NRC in References 5 and 6.

The purpose of this letter is for Duke to commit to fuel rod corrosion analyses required by the Reference 1 topical. This request is for NRC approval of BAW-10186P-A methods, as clarified in Reference 3, in-house by Duke on the Oconee, McGuire, and Catawba Mark-B and Mark-BW17 fuel designs. Use will involve application of the codes and methods specified in Reference 1 to reload core designs. Duke Power requests written concurrence from the NRC by March 31, 1998 in order to support design calculations for future cycles on all seven units.

If you have any questions concerning this request, please contact Mr. Ron Gribble at (704) 382-6160.



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