



October 15, 1984
IPN-84-43

Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Cycle 4/5 Refueling - Letter of Notification

Dear Sir:

This letter serves to advise you that the Authority will reload the Indian Point 3, Cycle 5 with fuel assemblies partially fabricated in Europe. British Nuclear Fuels Limited (BNFL) will convert the UF_6 to UO_2 utilizing the Integrated Direct Route (IDR) process. The IDR process is initiated by vaporizing the UF_6 and combining the UF_6 with hydrogen in a rotary kiln to produce UO_2 powder. The UO_2 powder is then homogenized in a Nautamix blender.

Franco-Belge de Fabrication de Combustibles (FBFC) will be employed to pelletize the UO_2 and to load the fuel rods. Westinghouse will supply FBFC with the zircaloy tubes, end plugs and plenum springs. The fabricated rods will then be transported to the Westinghouse plant at Columbia, South Carolina for final processing into 15 x 15 Optimized Fuel Assemblies (OFAs). The Westinghouse OFA design features and methodology have been generically approved by the NRC via the review of Westinghouse Topical Report, WCAP-9500, "Reference Core Report - 17 x 17 Optimized Fuel Assembly."

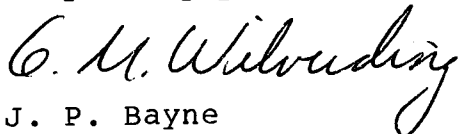
FBFC supplies nuclear fuel mainly to meet the requirements of the French PWR program which comprises more than 40 reactors either in operation or under construction. It also supplies fuel for the Westinghouse power plants - Doel and Tihange in Belgium. FBFC has fabricated PWR fuel for 43 initial cores and 80 reload regions. Westinghouse has a technical assistance agreement with FBFC, and has provided copies of their drawings, specifications, and operating procedures necessary for the fabrication of fuel for Indian Point 3. This effort has been further supplemented by extensive qualification efforts by the Westinghouse Quality Assurance Department. As a Westinghouse licensee, FBFC has been audited on an annual to an eighteen month basis since 1976.

As part of the qualification of the IDR processed UO_2 powder, the pellets will be subjected to a thermal stability test in accordance with Regulatory Guide 1.126. All component parts in these fuel assemblies will be either fabricated or procured by Westinghouse in accordance with their quality control program with the exception of the UO_2 powder which will be produced by BNFL and pellets which will be fabricated by FBFC. The production of the UO_2 powder and the subsequent pelletizing will comply with Westinghouse's specifications. The Authority surveillance engineers will audit the FBFC fabrication facilities and will monitor the assemblies manufacture to assure compliance with all regulatory and quality requirements.

An additional feature of this reload is the introduction of the Westinghouse Wet Annular Burnable Absorber (WABA). The design features of the WABA have been submitted to the NRC via Westinghouse Topical Report, WCAP-10021 Rev. 1, "Westinghouse Wet Annular Burnable Absorber Evaluation Report".

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

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J. P. Bayne
First Executive Vice President
Chief Operations Officer

cc: Resident Inspector's Office
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U. S. Nuclear Regulatory Commission
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