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U.S. Nuclear Regulatory Commission
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Subject: Duke Power Comments on the Mixed Oxide (MOX) Fuel Fabrication Facility (MFFF) Environmental Impact Statement (EIS) Scoping Process (File 1607.61)

Thank you for the opportunity to provide comments on the scope of the MFFF EIS.

A Duke Energy subsidiary, Duke Engineering & Services, Inc., is the lead partner in Duke Cogema Stone & Webster, LLC (DCS), the prospective licensee for the MFFF. Duke Power, a division of Duke Energy, has no direct involvement in the development of the MFFF. However, Duke Power is working as a subcontractor to DCS on a related part of the MOX Fuel Project. Duke Power operates the McGuire and Catawba Nuclear Stations, and it is currently planned that those stations will use the MOX fuel produced at the MFFF. Irradiating the MOX fuel will destroy much of the plutonium in the fuel and isotopically degrade the remainder, rendering the material unattractive for theft, diversion, or re-use in nuclear weapons.

Based on comments at recent MFFF EIS scoping meetings, Duke Power notes with some concern that the Nuclear Regulatory Commission (NRC) may be considering evaluating the environmental impacts of MOX fuel use at McGuire and Catawba as a part of the MFFF licensing and environmental review process. It is in connection with this concern that Duke Power offers the following comments on the scope of the MFFF EIS.

MFFF EIS Comments

1. **Effects of MOX fuel use in reactors have been addressed in conjunction with other United States government actions.** The Department of Energy (DOE) has performed a generic assessment of the safety and environmental impacts of weapons grade MOX fuel use in commercial nuclear reactors. DOE documented that assessment in the *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic EIS* (DOE/EIS-0229, December 1996). In addition, DOE performed a specific assessment of the safety and environmental impacts of weapons grade MOX fuel use in the McGuire and Catawba reactors. DOE documented that assessment in the *Surplus Plutonium Disposition Final Environmental Impact Statement* (DOE/EIS-0283, November 1999).

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2. **The reactor effects of using MOX fuel should be addressed in only one NRC licensing action.** Before the McGuire and Catawba reactors can use any MOX fuel, they must apply for and receive NRC approval in the form of reactor operating license amendments. Accordingly, Duke Power, the operator of the McGuire and Catawba Nuclear Stations, is planning to submit MOX fuel-related license amendment requests to the NRC. In accordance with NRC requirements, those submittals will address the impact of using MOX fuel on public health and safety. There is no need to address the reactor use of MOX fuel in multiple regulatory reviews by different NRC offices. Including reactor impacts in the MFFF environmental review would inevitably delay the overall MOX Fuel Project licensing process and add cost to the government, with no commensurate benefit in the area of public health and safety.

3. **Addressing the reactor use of MOX fuel as a part of the MFFF licensing process would be counter to established precedent for nuclear fuel cycle facilities.** The MFFF EIS should concentrate on the environmental impacts of constructing, operating, and deactivating that facility. It is Duke Power's understanding that the NRC has never before addressed the ultimate reactor-specific impacts of the use of a product of a domestic nuclear fuel cycle facility as a part of the environmental review of such a facility. Absent some compelling reason, the NRC should not deviate from this established precedent for the MFFF.

4. **MOX fuel has been fabricated and used in the United States in the past, and it is made and used on an industrial scale in European countries today. The NRC should consider the precedents of past and current application of MOX fuel technology worldwide in the MFFF environmental review as well as other future MOX Fuel Project-related NRC reviews.** Currently, thirty-five reactors (thirty-three pressurized water reactors) are using significant quantities of MOX fuel in France, Germany, Belgium, and Switzerland. In addition, MOX fuel demonstration programs were carried out successfully under NRC oversight at five United States commercial nuclear reactors, and some of those programs involved plutonium that was close to weapons grade. These facts provide substantial confidence that the impacts of weapons grade MOX fuel use at McGuire and Catawba will ultimately prove acceptable under United States regulatory requirements.

If you have any questions on these comments, please contact Steve Nesbit at (704) 382-2197.

Sincerely,

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