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To: <TEH@nrc.gov>
Date: 5/17/01 11:09AM
Subject: Public Comments on MOX Fuel EIS

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Mr. Michael T. Lesar
Acting Chief, Rules & Directives Branch,
Division of Administrative Services, Office of Administration

C/O Mr. Tim Harris
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

As a former nuclear submarine officer, with a nuclear engineering degree, and as a licensed professional engineer who served the nuclear industry for more than two decades, I am writing to request that NRC deny a license for the construction of the MOX fuel factory. I would also respectfully request that the comment period be extended by at least 90 days past May 21, 2001 to ensure a thorough public comment on this radical technology before any decisions are made with regard to its implementation, usability and use.

I fully support non-proliferation: establishing a global plutonium economy is not a solution to reduce weapons inventories that must be marshaled and managed with integrity to prevent their diversion for ill purpose. Licensing a MOX factory would create such an economy, support proliferation and subvert U.S. non-proliferation policy, efforts and results already achieved.

I fully support maintaining a solid and secure wall of separation between commercial and military nuclear materials and their use. Use of MOX fuel to "dispose" of weapons material would eliminate this wall, reverse this sound policy, and send absolutely the wrong message to the rogue nations and our allies, indeed, the world. The message would say, "do what we Americans dictate, not what we do."

MOX is not simply a "higher octane" uranium fuel; it represents a very different fuel cycle. MOX cannot be treated in the design, licensing, construction and management of production and utilization facilities as simply a vendor designed fuel "improvement". I fully support a complete, sound and rigorous safety analysis on the use of this fuel throughout its life cycle (cradle to grave). Surely such an analysis would point to the use of MOX fuel in current generation plants, particularly plants housed in ice-condenser containments and already approaching end of design life, as a high risk venture; a risk we as the public need not have to take. Such an analysis must also account for the safe disposition (decommissioning) of all facilities (factories, reactors, and fuel handling equipment) and the fuel itself. Surely such an analysis would demonstrate that the current infrastructure is not equipped to handle either un-irradiated or irradiated MOX fuel and that many other actions would be required. We must not be in a rush to establish a MOX fuel factory simply because we can do so. Just as the first commercial reactor was evaluated and licensed, indeed more thoroughly, proposed use of MOX must be treated in the licensing process

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for what it is: a totally new nuclear technology and fuel cycle. The public must not be shut out of this process in the name of streamlining for corporate benefit.

Conventional nuclear (uranium) power is not a forgiving technology. Safe handling requires integrity in leadership to do the right thing far beyond simple adherence to rules or what we have come to understand as "standard business ethics". It also requires a disciplined management enforcing a rigorous attention to detail in every aspect of design, licensing, construction and operation. The physics of MOX fuel, in terms of reactor operation, is even less forgiving. How much more integrity and discipline must then be required of our leadership and management! We cannot simply continue to count on the age-old tradeoffs between regulatory and management costs, production revenues, and safety to ensure that the public is protected. We cannot and must not continue to allow a regulatory environment which shuttles critical safety issues, important to each specific facility being licensed as well as the community in which it is to be operated, into some generic safety issue pile to be ignored for decades where no one is responsible for its closure but everyone will bear its consequences. Nor, in a MOX economy, can we rely for our safety upon an existing management and regulatory infrastructure that has allowed, as I have personally witnessed: such conditions as the following:

- + failure on the part of reactor vendors to implement basic design criteria and standards, allowing, for example, loose cold shutdown criteria, positive temperature coefficients, and flux tilt, in the name of economy of scale and other economics;
- + failure on the part of A-Es to implement in their design and construction, basic commitments such as fire protection measures, contained in station FSARs which serve as the basis for all licensing actions;
- + failure on the part of utility managements to undertake basic analyses of potential or actual problem conditions (e.g., environmental qualification and steam generator degradation) knowing that identified problems would require solution at shareholder expense and that NRC-identified problems or forced shutdowns would be fixed at rate-payer expense;
- + failure on the part of NRC to effectively follow-up the results of inspections, such as SSFIs which demonstrated that safety systems were in fact not capable of carrying out their design basis safety function - or inspections that demonstrated certain fuel carriers had ignored their cask quality programs in violation of their license, by requiring shutdown of the operation until meaningful re-start/JCO decisions could be made, based on verified fixes, and imposing civil penalties of such amounts as to actually economically prohibit future such operator lapses. Indeed, such inspections have tended to result in reducing the rigor or fully discontinuing such inspections, chastisement of the inspectors, "no fault" fixes of the inspection results by failing to hold operator management fully accountable for the conditions, and simply taking at face value the management's "word" that agreed fixes had, in fact, been implemented.

Unless and until the entire commercial nuclear energy management and regulatory infrastructure is redesigned to ensure, through genuine integrity in leadership, the disciplined implementation of effective safety measures, we dare not experiment with such unforgiving technologies. Licensing a MOX fuel factory, thereby helping to establish a global

plutonium market, proliferating weapons grade materials, and placing a MOX-fueled reactor in the hands of those who have previously failed us all, would be an act of gross irresponsibility in utter disregard for public health and safety.

Sincerely,

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cc:
Honored elected officials
Other industry participants