

Key Points

National Level:

The Ford Nuclear Reactor at the Phoenix Memorial Laboratory (PML-FNR) is clearly considered a national resource by the U.S. Department of Energy. This was not only the first university research reactor in history (built as the University's memorial to those who lost their lives in WWII), but over the years it has sustained one of the nation's leading academic programs in nuclear science and engineering and produced the graduates that now populate many of the nation's leading programs in the nuclear industry and federal research laboratories. Although it is now approaching its fifth decade of operation, PML-FNR remains one of the nation's leading university research reactors for both nuclear energy research and training.

Over the past four years I have chaired the principal advisory committee to the Department of Energy on nuclear energy (the Nuclear Energy Research Advisory Committee or NERAC). Both this group and the President's Council of Advisors on Science and Technology (PCAST) have concluded that such university research reactors as PML-FNR are vitally important to the nation's ability to sustain nuclear fission power as an important element of the nation's energy portfolio (particularly in the years ahead as fossil fuels become more constrained by concerns about global climate change). It was largely as a consequence of this recognition and concerns that such facilities might be decommissioned in the face of university resource constraints that specific support for these facilities was included as a base (and growing) budget line in DOE's FY02 budget and beyond.

Although this program was clearly targeted to reflect the importance of facilities such as PML-FNR as national priorities through sustained support, the University's initial proposal for DOE funding was weak and just missed the cut for FY02. Michigan has now been included in FY03 funding, with the proposed funding beginning at \$1 M/y and building to \$2 M/y over the next several years (adequate to cover most of the operating support).

University Level:

The PML-FNR is important to both the educational and research programs of one of the University's most highly ranked departments, the Department of Nuclear Engineering (currently ranked 2nd in the nation, just behind MIT). This is one of the academic crown jewels of the University, in reputation, the quality of students and faculty, and the impact of its research.

Although there was understandable concern about the ongoing cost to the University to operate this facility, the recent offer by DOE to pick up a substantial portion of these costs changes the situation. Furthermore, capital costs that might be required to address relicensing concerns in the years ahead are estimated to be relatively modest (\$3 to \$4 M) and have been partially included in proposed DOE funding program. These costs are also modest compared to the projected costs for decommissioning the facility.

Summary:

As both a national priority, deemed important to the meeting the nation's human resources and research needs in nuclear energy, and as a University resource, critical to one of the University's leading academic programs, I believe a very strong case can be

made for continued operation of the PML-FNR. Furthermore, with the recent assurance of substantial federal support for operations, many of the financial concerns have now been addressed.

Although a decision was made last fall to begin the decommissioning process in the wake of failure to win DOE support in FY02, the offer of DOE funding in FY03 and beyond for PML-FNR makes it seem only prudent to reconsider this decision regarding a major national and University resource.