

## Nuclear Material Loopholes

READERS OF SCIENCE SHOULD BE GRATEFUL TO L. Palmer and G. Milhollin for describing Brazil's intention to operate a new uranium enrichment plant, and the proliferation concerns this action arouses ("Brazil's

nuclear puzzle," Policy Forum, 22 Oct., p. 617). If apprehension about global warming causes an expansion of nuclear power deployment during the next half century (*J*), it is vital to limit the spread of dangerous fuel cycle activities—enrichment and reprocessing—that can lead to nuclear weapons.

Palmer and Milhollin suggest that if Brazil cooperates with International Atomic Energy Agency (IAEA) inspections and presumably accepts the "additional protocol" for challenge inspections, Brazil will be a "good nuclear citizen," and the United States and the rest of the world should accept Brazil's enrichment activity.

We disagree. As we (*2*), and others, have argued, the proper policy is to avoid all new enrichment and reprocessing activity in non-nuclear weapons states and for nuclear supplier states to provide recipient states with internationally assured enrichment and spent fuel disposal services at attractive prices. This would begin with a "stay-put" period of 10 to 15 years, after which nations could reevaluate in light of nuclear power and nonproliferation developments.

We should not adopt a policy toward Brazil that we are unwilling to accept for Iran and North Korea. The latter have brought to a head the shortcomings of the Nuclear Nonproliferation Treaty (NPT) implementation regime—these states employ the regime to move to the brink of a weapons capability within the treaty framework. Closing NPT loopholes needs urgent attention, and Brazil will jeopardize the possibilities for successful resolution if they move forward with their uranium enrichment plant. The argument that Brazil is not seeking a weapons capability has not always been true, and IAEA inspections are not an adequate safeguard against states that are seeking nuclear capability, such as Iran and North Korea. IAEA inspections are not sufficient for controlling the spread of nuclear weapons capability, and the United States will not be successful with a policy based on a chosen few—the United States and other nuclear weapons states—deciding which other nations can safely develop fuel cycle activities and which cannot. The United States should vigorously oppose the Brazilian enrichment plant and offer Brazil concrete incentives to abandon this dangerous course of action. Brazil faces a choice of being a spoiler in modernizing the NPT implementation regime or of being a leader in accomplishing that important end.

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